

DEPARTMENT OF ARCHITECTURE
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date: 14.12.2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B. Arch.

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
AR102	Computer Application in Architecture – I	NO	Prof. Amalan Kaushik	II	
AR104	History of Architecture – II	NO	Prof. G. Sangeetha	II	
AR106	Mechanics of Solids	NO	Dr. L. Saikala	II	
AR108	Architectural Graphics – II	NO	Dr. P. Gopalakrishnan	II	
AR110	Building Construction – I	NO	Prof. S. Rajendra Babu	II	
AR112	Architectural Design – II	NO	Dr. Tony Marcel Nisha Prof. Lakshya Satija	II	
AR114	Visual Arts – II	NO	Dr. K. Premkumar	II	
AR202	Climate Responsive Architecture	NO	Prof. Amalan Kaushik	IV	

AR204	Concrete Technology	NO	Prof. K. Bhagyasri	IV	
AR206	Contemporary Architecture	NO	Dr. D. Kannamma	IV	
AR208	Water Supply and Drainage	NO	Prof. Saurabh Kumar	IV	
AR210	Building Construction and Materials – III	NO	Prof. Wilson F	IV	
AR212	Architectural Design – IV	NO	Prof. Bella Valdaris Prof. G. Sangeetha	IV	
AR214	Strength of Materials Laboratory	NO	Dr. L. Saikala	IV	
AR302	Air-conditioning and Mechanical Services	NO	Dr. A. Meenatchi Sundaram	VI	
AR304	Estimation and Specification	NO	Prof. Saurabh Kumar	VI	
AR306	Landscape Architecture	NO	Prof. S. Rajendra Babu	VI	
AR308	Building Construction and Materials - V	NO	Dr. Tony Marcel Nisha	VI	
AR310	Architectural Design – VI	NO	Prof. Saurabh Kumar Prof. Amalan Kaushik	VI	

AR312	Architectural Working Drawings	NO	Dr. P. Gopalakrishnan	VI	
AR401	Professional training	NO	Prof. Amalan Kaushik	VIII	
AR502	Building Economics and Construction Management	NO	Prof. Lakshya Satija	X	
AR504	Professional Practice	NO	Dr. D. Kannamma	X	
AR506	Dissertation – II	NO	Dr. K. Thirumaran,	X	

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
AR352	Vernacular Architecture	NO	Prof. Bella Valdaris	VI
AR354	Barrier Free Environment	NO	Dr. Tony Marcel Nisha	VI
AR356	Facilities Programming	NO	Prof. Lakshya Satija	VI
AR552	Housing	NO	Prof. Wilson F	X
AR554	Architectural Conservation	NO	Prof. Pudhuma Bharathi	X
AR556	Architectural Journalism	NO	Prof. K. Bhagyasri	X

3. **OPEN ELECTIVES**

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

4. **MINOR COURSES (Only B.Tech)**

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

5. **HONOURS COURSES (Only B.Tech)**

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

DEPARTMENT OF ENERGY AND ENVIRONMENT (CEESAT)
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date:

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech.

1. GIR, ELR AND CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
ENIR11	Energy and Environmental Engineering	Nil	Dr.M.Premalatha	II	Production - A
ENIR11	Energy and Environmental Engineering	Nil	Dr.M.Premalatha	II	Mechanical-B
ENIR11	Energy and Environmental Engineering	Nil	Dr.Siva Krishna Rao D A	II	MEchanical-A
ENIR11	Energy and Environmental Engineering	Nil	Dr.Siva Krishna Rao D A	II	Chemical
ENIR11	Energy and Environmental Engineering	Nil	Dr.Aditya Kumar	II	Civil-A
ENIR11	Energy and Environmental Engineering	Nil	Dr.Aditya Kumar	II	MME
ENIR11	Energy and Environmental Engineering	Nil	Ph.D. Scholar -1	II	Civil-B
ENIR11	Energy and Environmental Engineering	Nil	Ph.D. Scholar -2	II	Production-B

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ENMI17	Wind energy Fundamentals		Dr.Ruben Sudhakar D	IV, VI, VIII
ENMI11	Power Plant Engineering		Dr.VM Jaganathan	IV, VI, VIII

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ENMI17	Wind energy Fundamentals		Dr.Ruben Sudhakar D	IV, VI, VIII
ENMI11	Power Plant Engineering		Dr.VM Jaganathan	IV, VI, VIII

DEPARTMENT OF CHEMICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date: 23.12.2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech. (Chemical)

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
CLPC11	Process Calculations	NONE	Dr. M.Arivazhagan	II	NA
MAIR41	Mathematics - III	NONE	From Mathematics Dept.	IV	NA
CLPC16	Heat Transfer	CLPC13	Dr. P.Kalaichelvi	IV	NA
CLPC17	Particulate Science Technology	NONE	Dr. J.Sarat Chandra babu	IV	NA
CLPC18	Mass Transfer - I	CLPC11, CLPC14	Dr. T.Sivasankar	IV	NA
CLLR13	Particulate Science & Technology Laboratory	CLPC17	Dr. J.Sarat Chandra Babu/ Dr. A.Arunagiri/ Dr. Jyoti Sahu/ Mr. Atti Srinivas	IV	NA
CLLR14	Heat Transfer Laboratory	CLPC16	Dr. P. Kalaichelvi/ Dr. G.Arthanareeswaran/ Mrs. M.Jayachitra	IV	NA
CLPC23	Process Modeling and Simulation	CLPC13, CLPC16, CLPC18, CLPC20	Dr. Jyoti Sahu	VI	NA
CLPC24	Process Dynamics and Control	MAIR21	Dr. T.K.Radhakrishnan	VI	NA
CLPC25	Project Engineering and Economics	CLPC17	Dr. G.Arthanareeswaran	VI	NA
CLIR16	Industrial Lectures	NONE	Dr. K.Muthukumar	VI	NA

CLLR17	Process Dynamics and Control Laboratory	CLPC24	Dr. T.K.Radhakrishnan/ Dr. N.Samsudeen / Dr. K.Sankar/ Mr. N.Rajasekhar	VI	NA
CLLR18	Process Modeling and Simulation Lab	CLPC23	Dr. M.Perumalsamy/ Dr. Kartikeya Shukla	VI	NA
CLIR18	Comprehensive Viva Voce	NONE	Dr. M.Perumalsamy/Dr. S.Saravanan/ Dr. Kartikeya Shukla	VIII	NA
CLIR19	Project Work	NONE	Dr. K.N.Sheeba/ Dr. N.Samsudeen		

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CLPE16	Material Science and Technology	NONE	Dr. Kartikeya Shukla	IV
CLPE22	Food Processing Technology	NONE	Mr. Muthu Pandian. P/ Ms. Manonmani	IV
CLPE17	Industrial Process Biotechnology	NONE	Ms. Amrutha/ Ms. Srinithya	VI
CLPE21	Electrochemical Reaction Engg.	NONE	Dr. M.Matheswaran	VI
CLPE14	Modern Separation Processes	CLPC18, CLPC20	Mr.Neeraj V.S/ Mr. G.Vigneshhwaran	VIII
CLPE29	Heterogeneous Chemical Reaction Engineering	CLPC21	Dr. N.Samsudeen	VI

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CLOE16	Bioenergy	NONE	Ms. Durgadevi S/ Mrs. Sandhya.P	IV
CLOE12	Optimization Technique	NONE	Dr. S.Saravanan	VI

CLOE12	Optimization Technique	NONE	Dr. S.Saravanan	VIII
CLOE14	Process Instrumentation	NONE	Dr. K.Sankar	VIII

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

5. HONOURS COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CLHO12	Pinch Analysis and Heat Exchange Network Design	CLPC14, CLPC16	Dr. A.Arunagiri	6

DEPARTMENT OF CHEMISTRY

NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date: 28-12-2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech.

1. GIR, CORE AND ELR (For circuit branches)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
CHIR11	Chemistry	Nil	Dr. L. Cindrella	II	ECE-A
CHIR11	Chemistry	Nil	Dr. R.Karvembu	II	ECE-B
CHIR11	Chemistry	Nil	Dr. Ganesh Chandra Nandi	II	CSE-B
CHIR11	Chemistry	Nil	Dr. Sunandan Sarkar	II	CSE-A
CHIR11	Chemistry	Nil	Dr. N. Jothilakshmi	II	ICE-B
CHIR11	Chemistry	Nil	Dr. Baby Viswambharan	II	EEE-A
CHIR11	Chemistry	Nil	Dr. C. Arivazhagan	II	ICE-A
CHIR11	Chemistry	Nil	Dr. C. Arivazhagan	II	EEE-B
CHIR12	Chemistry	Nil	Dr. Sunandan Sarkar	II	CSE-A
CHIR12	Chemistry	Nil	Dr. Sarthak Mandal	II	ECE-B
CHIR12	Chemistry	Nil	Dr. N. Jothilakshmi	II	ICE-B
CHIR12	Chemistry	Nil	Dr. Baby Viswambharan	II	EEE-A
CHIR12	Chemistry	Nil	Dr. Baby Viswambharan	II	ECE-A
CHIR12	Chemistry	Nil	PMRF-1	II	ICE-A
CHIR12	Chemistry	Nil	PMRF-2	II	EEE-B
CHIR12	Chemistry	Nil	PMRF-3	II	CSE-B

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
NIL				

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CHMI 608	Molecular Spectroscopy	Nil	Dr. Sarthak Mandal	II
CHMI 629	Polymer Chemistry	Nil	Dr. V.M.Biju	II

DEPARTMENT OF CIVIL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date:

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech. (Civil Engineering)

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MAIR21	Complex Analysis and Differential Equations			II
PHIR11	Physics			II
PHIR12	Physics Lab			II
CSIR11	Introduction to Computer Programming (Theory & Lab)			II
ENIR11	Energy and Environmental Engineering			II
PRIR11	Engineering Practice			II
CEPC10	Engineering Mechanics			II
MAIR42	Probability and Numerical Techniques			IV
CEPC15	Analysis of Indeterminate Structures			IV
CEPC16	Geotechnical Engineering-I			IV
CEPC17	Environmental Engineering-I			IV

CELR13	Fluid Mechanics Laboratory			IV
CELR14	Building Planning and Drawing			IV
CEPC24	Basic Steel Structural Elements			VI
CEPC22	Hydrology and Irrigation Engineering			VI
CEPC23	Railway, Airport and Harbour Engineering			VI
CEIR17	Industrial Lecture			VI
CELR18	Computational Laboratory			VI
CELR17	Transportation Engineering Laboratory			VI
HSIR13	Industrial Economics and Foreign Trade			VIII
CEIR17	Project Work			VIII

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CEPE34	Ground Water Hydrology	CEPC12	Dr. Aneesh	IV
CEPE11	Elementary Structural Dynamics		Dr. Greegar	IV

CEPE39	Coastal Engineering		Dr. Manjula	IV
CEPE33	Advanced Surveying Techniques	CEPC14	Dr. Nisha	VI
CEPE19	Traffic Engineering and Safety	CEPC20	Dr. Darshana	VI
CEPE42	Heritage Structures		Dr. J Karthikeyan	VI
CEPE16	Advanced Reinforced Concrete Design		Dr. Raghavan	VI
CEPE27	Advanced Foundation Engineering		Dr. Vinay	VIII
CEPE18	Advanced Structural Analysis OR Advanced Steel Structural Elements		Dr. Baskar	VIII
CEPE20	Pavement Analysis and Design	CEPC20	Dr. Sunitha	VIII

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CEOE10	Remote Sensing and GIS	-	Dr. S. Saravanan	VI

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

5. HONOURS COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CEHO16	Pavement Construction and Management			VI/VIII
CEHO11	Basics of Finite Element Methods			VI/VIII
CEHO14	Theory of Plates and Introduction to Shells			VI/VIII

CEHO20	Biological Treatment of Wastewater			VI/VIII
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date: 23-12-2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech.

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
CSIR12	Introduction to Computer Programming (CIVIL)	--	Ms. Thushara G A	II	A
CSIR12	Introduction to Computer Programming (CIVIL)	--	Ms. Divya	II	B
CSIR12	Introduction to Computer Programming (MECH)	--	Mr. Anmol Tigga	II	A
CSIR12	Introduction to Computer Programming (MECH)	--	Ms. Shetanshu Parmar	II	B
CSPC11	Discrete Structures	--	Dr. J. Pavan Kumar	II	A
CSPC11	Discrete Structures	--	Dr. M. Sridevi	II	B
CSIR21	Essentials of Computer Science	--	Ms. Madhusmita Priyadarshini Sahoo	II	A
CSIR21	Essentials of Computer Science	--	Dr. S. Usha Kiruthika	II	B
CSPC41	Formal Languages and Automata Theory	CSPC11	Dr. Rajeswari Sridhar	IV	A
CSPC41	Formal Languages and Automata Theory	CSPC11	Dr. S. Usha Kiruthika	IV	B
CSPC42	Design and Analysis of Algorithms	CSPC32	Dr. M. Sai Krishna	IV	A
CSPC42	Design and Analysis of Algorithms	CSPC32	Dr. R. Mohan	IV	B

CSPC43	Operating Systems	--	Dr. S. Jaya Nirmala	IV	A
CSPC43	Operating Systems	--	Dr. S. Mary Saira Bhanu	IV	B
CSLR41	Algorithms Laboratory	--	Dr. M. Sai Krishna	IV	A
CSLR41	Algorithms Laboratory	--	Dr. R. Mohan	IV	B
CSLR42	Operating Systems Lab	--	Dr. S. Jaya Nirmala	IV	A
CSLR42	Operating Systems Lab	--	Dr. E. Sivasankar	IV	B
HSIR13	Industrial Economics and Foreign Trades	--	HOD/Humanities	IV	A
HSIR13	Industrial Economics and Foreign Trades	--	HOD/Humanities	IV	B
CSPC61	Embedded Systems Architectures	CSPC51	Dr. B. Shameedha Begum	VI	A
CSPC61	Embedded Systems Architectures	CSPC51	Ms. Aditi Roy	VI	B
CSPC62	Compiler Design	CSPC41	Dr. Kamalika Bhattacharjee	VI	A
CSPC62	Compiler Design	CSPC41	Dr. K. Sitara	VI	B
CSPC63	Principles of Cryptography	--	Dr. C. Mala	VI	A
CSPC63	Principles of Cryptography	--	Dr. Kunwar Singh	VI	B
CSLR61	Embedded Systems Laboratory	--	Dr. S. Usha Kiruthika	VI	A
CSLR61	Embedded Systems Laboratory	--	Dr. Madhukrishna Priyadarsini	VI	B
CSLR62	App Development Laboratory	--	Dr. A. Santhana Vijayan	VI	A
CSLR62	App Development Laboratory	--	Dr. R. Bala Krishnan	VI	B
HSIR14	Professional Ethics	--	HOD/Humanities	VI	A

HSIR14	Professional Ethics	--	HOD/Humanities	VI	B
CSIR61	Industrial Lecture	--	Dr. M. Brindha	VI	A
CSIR61	Industrial Lecture	--	Dr. M. Brindha	VI	B
CSIR81	Comprehensive Viva-Voce	--	Dr. M. Sai Krishna	VIII	A
CSIR81	Comprehensive Viva-Voce	--	Dr. K. Sitara	VIII	B
CSIR82	Project Work / Equivalent No. of Electives	--	Dr. B. Nithya Dr. A. Santhana Vijayan Dr. K. Sitara	VIII	A
CSIR82	Project Work / Equivalent No. of Electives	--	Dr. B. Nithya Dr. A. Santhana Vijayan Dr. K. Sitara	VIII	B

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CSPE41	Software Engineering	--	Dr. C. Oswald	IV
CSPE42	Design Thinking	--	Dr. Kamalika Bhattacharjee & Mr. Vicky Vikrant	IV
CSPE43	Advanced Data Structures and Algorithms	CSPC31	Dr. B. Nithya	IV
CSPE63	Artificial Intelligence and its Applications	CSPC54	Dr. A. Santhana Vijayan	VI
CSPE64	Data Analytics	CSPC52	Dr. E. Sivasankar	VI
CSPE65	Machine Learning Techniques and Practices	CSPC54	Dr. S. Jaya Nirmala	VI
CSPE81	Data Science	--	Dr. M. Brindha	VIII
CSPE83	Internet of Things - Principles and Practices	--	Dr. Madhukrishna Priyadarsini	VIII

CSPE84	Social Network Analysis	--	Dr. Chandramani Chaudhary	VIII
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3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CSOE18	Machine Learning for Engineering Applications	--	Dr. R. Bala Krishnan & Dr. C. Oswald	IV
CSOE23	Web Technology	--	Mr. Mekala Ratna Raju & Mr. Rajeev Kumar	VI
CSOE21	Software Project Management	--	Mr. Ambairam Muthu Sivakrishna	VIII

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CSMI11	Data Structures and Algorithms	--	Dr. B. Nithya & Dr. J. Pavan Kumar	IV
CSMI13	Operating Systems	--	Dr. M. Brindha & Mr. Kiran Mohan M S	VI
CSMI15	Software Engineering	--	Ms. Deepthi shree A M	VIII

5. HONOURS COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
CSHO13	Multi-Core Programming	CSPC51	Mr. Dipanjan Banarjee	VI & VIII

**DEPARTMENT OF ELECTRONICS AND COMMUNICATION
ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI**

Date:

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech.

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ECPC13	Semiconductor Physics and Devices (B section)	None	Dr.Parthasarathy R	II
ECPC13	Semiconductor Physics and Devices(A section)	None	Dr.Varun Gopi P	II
ECIR15	Introduction to Electronics and communication Engineering (A & B section)	None	Dr.Avik Hati	II
ECLR12	Electronic Circuits Laboratory(A Section)	None	Dr.P.Maheswaran	IV
ECLR12	Electronic Circuits Laboratory(B Section)	None	Dr.B.Chandrababu Naik	IV
ECLR13	Microprocessor And Microcontroller Laboratory(A Section)	None	Dr.R.Thilagavathy	IV
ECLR13	Microprocessor And Microcontroller Laboratory(B Section)	None	Dr.Srinivasulu Jogi	IV
ECLR16	Communication Engineering Laboratory (A Section)	None	Dr.B.Rebekka	VI
ECLR16	Communication Engineering Laboratory (B Section)	None	Dr.Avik Hati	VI
ECLR17	Microwave & Fiber Optic Laboratory (A Section)	None	Dr.N.Gunavathi, Dr.Parthasarathy	VI
ECLR17	Microwave & Fiber Optic Laboratory (B Section)	None	Dr. Hemant Kumar Dr.Parthasarathy	VI
ECIR19	Industrial Lecture (A & B section)		Dr.Beechu Naresh Kumar Reddy, Dr. Murali Krishna,	VI

			Dr.Parthasarathy R, Dr.Avik Hati	
ECIR17	Project Work (A & B Section)		Dr.E.S.Gopi, Dr.N.Gunavathi, Dr.P.Sudharsan, Dr.Srinivasulu Jogi	VIII
HSIR13	Industrial Economics and Foreign Trades (A & B Section)		Faculty from Humanities department	IV
ECPC15	Digital Signal Processing (A Section)	ECPC10	Dr.S.Deivalakshmi	IV
ECPC15	Digital Signal Processing (B Section)	ECPC10	Dr.P.Palanisamy	IV
ECPC16	Transmission Lines And Waveguides (A Section)	ECPC12	Dr.R.Pandeeswari	IV
ECPC16	Transmission Lines And Waveguides (B Section)	ECPC12	Dr.Hemant Kumar	IV
ECPC17	Electronic Circuits (A Sec)	ECPC13	Dr.R.Malmathan Raj	IV
ECPC17	Electronic Circuits (A Sec)	ECPC13	Dr.P.Maheswaran	IV
ECPC22	Wireless Communication(A Sec)	ECPC19	Dr.B.Rebekka	VI
ECPC22	Wireless Communication(B Sec)	ECPC19	Dr.B.Chandrababu Naik	VI
ECPC23	Vlsi Systems (A Section)	ECPC21	Dr.R.K.Kavitha	VI
ECPC23	Vlsi Systems (B Section)	ECPC21	Dr. Murali Krishna	VI
ECPC24	Microwave Electronics(A Sec)	ECPC16	Dr.N.Gunavathi	VI
ECPC24	Microwave Electronics(B Sec)	ECPC16	Dr.R.K.Jeyachitra	VI
ECIR18	Comprehensive Viva Voce	None	Dr.Beechu Naresh Kumar Reddy, Dr.B.Bibin Francis	VIII

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ECPE12	Microprocessors And Microcontrollers (A Section)	None	Dr.R.Thilagavathy	IV
ECPE12	Microprocessors And Microcontrollers (B Section)	None	Dr.Srinivasulu Jogi	IV

ECPE11	Wireless Local Area Network (A & B Section)	ECPE10	Dr.P.Sudharsan	IV
ECPE24	Internet of Things (A & B Section)	CSIR11, ECPE12, C/C++ and Python Programming skills	Dr.M.Bhaskar	VI
ECPE32	Digital Signal Processing For Wireless Communication (A & B Sec)	ECPC15	Dr.E.S.Gopi	VI
ECPE22	Pattern Recognition (A & B Section)	None	Dr.E.S.Gopi	VI
ECPE31	Fiber Optic Communication (A & B Sec)	ECPC12 & ECPC18	Dr.G.Thavasi Raja	VI
ECPE42	Electromagnetic Interference And Compatibility (A & B Sec)	None	Dr.S.S.Karthikeyan	VI
ECPE14	Embedded Systems (A & B Sec)	None	Dr.Beechu Naresh Kumar Reddy	VI
ECPE41	Electronic Design Automation Tools (A & B sec)	None	Dr.R.K.Kavitha	VIII
ECPE32	Digital Signal Processing for wireless Communication (A & B Sec)	ECPC15	Dr.E.S.Gopi	VIII
ECPE37	Low Power VLSI Circuits (A & B Sec)	ECPC23	Dr.M.Bhaskar	VIII
ECPE22	Pattern Recognition (A & B Sec)	None	Dr.E.S.Gopi	VIII

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ECOE66	Deep Learning	None	Dr.B.Bibin Francis	VI, VIII
ECOE23	INTERNET OF THINGS	CSIR11, C/C++, Python Programming skills	Dr. M. Bhaskar	VI
ECOE15	PATTERN RECOGNITION	None	Dr. E.S. Gopi	VI, VIII

ECOE 63	Introduction to Machine Learning	None	Dr.B.Bibin Francis	VI, VIII
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4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ECMI22	ANALOG INTEGRATED CIRCUITS	ECMI17	Dr. Murali Krishna	IV
ECMI25	VLSI SYSTEMS	ECMI14	Dr. Murali Krishna	VI

5. HONOURS COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ECHO22	Design of ASICs	None	Dr. G. Lakshminarayanan	VIII

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI**

Date: 20 December
2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech. Electrical and Electronics
Engineering

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
EEIR15	INTRODUCTION TO ELECTRICAL AND ELECTRONICS ENGINEERING (Branch Specific Course)	-	Dr. Josephine R L	II Semester	A section
EEIR15	INTRODUCTION TO ELECTRICAL AND ELECTRONICS ENGINEERING (Branch Specific Course)	-	Dr. Aneesa Farhan M A	II Semester	B section
EEPC10	CIRCUIT THEORY	MAIR12	Dr. N. Kumaresan	II Semester	A section
EEPC10	CIRCUIT THEORY	MAIR12	Dr. C. Nagamani	II Semester	B section
HSIR13	INDUSTRIAL ECONOMICS AND FOREIGN TRADE		Faculty from Humanities	IV Semester	A section
HSIR13	INDUSTRIAL ECONOMICS AND FOREIGN TRADE		Faculty from Humanities	IV Semester	B section
EEPC15	AC MACHINES	EEPC12	Dr. P. Raja	IV Semester	A section

EEPC15	AC MACHINES	EEPC12	Dr. M. Venkata Kirthiga	IV Semester	B section
EEPC16	ANALOG ELECTRONIC CIRCUITS	EEPC13	Dr. Shelas Sathyan	IV Semester	A section
EEPC16	ANALOG ELECTRONIC CIRCUITS	EEPC13	Dr. K. Sateesh Kumar	IV Semester	B section
EEPC17	TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY	EEPC10	Dr. M. P. Selvan	IV Semester	A section
EEPC17	TRANSMISSION AND DISTRIBUTION OF ELECTRICAL ENERGY	EEPC10	Dr. Sishaj P Simon	IV Semester	B section
EELR12	ELECTRONIC CIRCUITS LABORATORY	EEPC13	Dr. Shelas Sathyan	IV Semester	A section
EELR12	ELECTRONIC CIRCUITS LABORATORY	EEPC13	HODEEEE	IV Semester	B section
EELR13	SYNCHRONOUS AND INDUCTION MACHINES LAB	EEPC15	HODEEEE	IV Semester	A section
EELR13	SYNCHRONOUS AND INDUCTION MACHINES LAB	EEPC15	HODEEEE	IV Semester	B section
EEIR19	INDUSTRIAL LECTURES	-	Dr. Josephine R L	VI Semester	A section
EEIR19	INDUSTRIAL LECTURES	-	Dr. Josephine R L	VI Semester	B section
EEPC22	MICROPROCESSORS AND MICROCONTROLLERS	EEPC14	Dr. S. Sudha	VI Semester	A section
EEPC22	MICROPROCESSORS AND MICROCONTROLLERS	EEPC14	Dr. Ankur Singh Rana	VI Semester	B section

EEPC23	MEASUREMENTS AND INSTRUMENTATION	EEPC21	Dr. Pinkymol K. P	VI Semester	A section
EEPC23	MEASUREMENTS AND INSTRUMENTATION	EEPC21	Dr. Aneesa Farhan M A	VI Semester	B section
EEPC24	POWER SYSTEM PROTECTION AND SWITCHGEAR	EEPC18	Dr. Ankur Singh Rana	VI Semester	A section
EEPC24	POWER SYSTEM PROTECTION AND SWITCHGEAR	EEPC18	Dr. S. Kayalvizhi	VI Semester	B section
EELR16	MICROCONTROLLER LAB	EEPC22	Dr. S. Sudha	VI Semester	A section
EELR16	MICROCONTROLLER LAB	EEPC22	HODEEEE	VI Semester	B section
EELR17	POWER SYSTEMS LAB	EEPC18	HODEEEE	VI Semester	A section
EELR17	POWER SYSTEMS LAB	EEPC18	Dr. Jaya Baratha Reddy	VI Semester	B section
HSIR14	PROFESSIONAL ETHICS	-	Faculty from Humanities	VI Semester	A section
HSIR14	PROFESSIONAL ETHICS	-	Faculty from Humanities	VI Semester	B section
EEIR17	PROJECT WORK		Dr. P. Raja & Dr. S. Mageshwari	VIII Semester	A section
EEIR17	PROJECT WORK		Dr. P. Raja & Dr. S. Mageshwari	VIII Semester	B section
EEIR18	COMPREHENSIVE VIVA VOCE EXAMINATION		Dr. P. Raja & Dr. S. Mageshwari	VIII Semester	A section
EEIR18	COMPREHENSIVE VIVA VOCE EXAMINATION		Dr. P. Raja & Dr. S. Mageshwari	VIII Semester	B section

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
EEPE34	MACHINE LEARNING AND DEEP LEARNING	MAIR32	Dr. Sishaj P Simon	B.Tech IV SEM
EEPE18	DIGITAL SIGNAL PROCESSING	MAIR32, EEPC14	Dr. Karthik Thirumala	B.Tech IV SEM
EEPE15	HIGH VOLTAGE ENGINEERING	EEPC10	Dr. Jose Thankachan	B.Tech IV SEM
EEPE26	WIND AND SOLAR ELECTRIC SYSTEMS	EEPC15, EEPC19	Dr. P. Srinivasa Rao Nayak	B.Tech VI SEM
EEPE38	ELECTRIC POWER QUALITY	EEPC17, EEPC18	Dr. Karthik Thirumala	B.Tech VI SEM
EEPE25	SPECIAL ELECTRICAL MACHINES	EEPC15, EEPC19	Dr. Jose Thankachan	B.Tech VI SEM
EEPE28	EMBEDDED SYSTEM DESIGN	EEPC22	Dr. S. Moorthi	B.Tech VIII SEM
EEPE24	FUNDAMENTALS OF FACTS	EEPC11, EEPC19	Dr. Josephine R L	B.Tech VIII SEM
EEPE32	ELECTRIC VEHICLE TECHNOLOGY	-	HODEEE	B.Tech VIII SEM

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
EEOE22	ELECTRIC POWER UTILIZATION	-	HODEEE	VI SEM

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
EEMI11	ELECTRICAL MACHINES	-	Dr. G. Saravana Ilango	IV SEM
EEMI14	POWER ELECTRONIC SYSTEMS	EEMI11	Dr. S. Senthil Kumar	VI SEM
EEMI15	POWER SYSTEMS ENGINEERING	EEMI11	Dr. M. P. Selvan	VIII SEM

5. HONOURS (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
EEHO13	POWER SWITCHING CONVERTERS	EEPC19	Dr. S. Mageshwari	VI SEM
EEHO19	DESIGN WITH PIC MICROCONTROLLERS	EEPC14	Dr. K. Sateesh Kumar	VIII SEM

DEPARTMENT OF HUMANITIES AND SOCIAL SCIENCES
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date: 20.12.2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech

1. GIR, ELR AND CORE COURSES

ENGLISH

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester	Section
HSIR11	English for Communication (ECE A)	-	Dr. V. K. Karthika	II	A
HSIR11	English for Communication (ECE B)	-	Dr. Anu Kuriakose	II	B
HSIR11	English for Communication (EEE A)	-	Dr. Nisha Viswanathan	II	A
HSIR11	English for Communication (EEE B)	-	Dr. Umasankar Patra	II	B
HSIR11	English for Communication (CSE A)	-	Dr. Anu Kuriakose	II	A
HSIR11	English for Communication (CSE B)	-	Mr. R. Gururaj	II	B

HSIR11	English for Communication (ICE A)	-	RS1 - Ms. K. Mohana Aishwarya	II	A
HSIR11	English for Communication (ICE B)	-	RS2 - Ms. B. Humaira Mariyam	II	B

ECONOMICS

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester	Section
HSIR13	Industrial Economics and Foreign Trade (II ECE A)	-	RS3 - Ms. Meera George	IV	A
HSIR13	Industrial Economics and Foreign Trade (II ECE B)	-	Dr. M. Padmaja	IV	B
HSIR13	Industrial Economics and Foreign Trade (II EEE A)	-	RS4 - Ms. Anjali Sreekumar	IV	A
HSIR13	Industrial Economics and Foreign Trade (II EEE B)	-	RS5 - Ms. Mary Kuriakose	IV	B
HSIR13	Industrial Economics and Foreign Trade (II CSE A)	-	Dr. R. Murugesan	IV	A

HSIR13	Industrial Economics and Foreign Trade (II CSE B)	-	Dr. M. Padmaja	IV	B
HSIR13	Industrial Economics and Foreign Trade (II ICE A)	-	Dr. G. Nagasubramaniyan	IV	A
HSIR13	Industrial Economics and Foreign Trade (II ICE B)	-	Dr. M. Padmaja	IV	B

ETHICS

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester	Section
HSIR14	Professional Ethics (III ECE A)	-	GF1	VI	A
HSIR14	Professional Ethics (III ECE B)	-	GF2	VI	B
HSIR14	Professional Ethics (III EEE A)	-	GF1	VI	A
HSIR14	Professional Ethics (III EEE B)	-	GF2	VI	B
HSIR14	Professional Ethics (III CSE A)	-	RS1-DoMS - Mr. A. D. J. Rajesh	VI	A

HSIR14	Professional Ethics (III CSE B)	-	GF3	VI	B
HSIR14	Professional Ethics (III ICE A)	-	GF3	VI	A
HSIR14	Professional Ethics (III ICE B)	-	RS2-DoMS - Mr. Fazeen Rasheed	VI	B

2. PROGRAMME ELECTIVES

ENGLISH

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester
-	-	-	-	-

ECONOMICS

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester
-	-	-	-	-

3. OPEN ELECTIVES

ENGLISH

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester
HSOE15	Philosophy, Science and Language	-	Dr. V. B. Vinod	VI & VIII
HSOE20	Academic Writing and Critical Thinking	-	Dr. R. Joseph Ponniah	VI & VIII
HSOE21	Introduction to Comics Studies	-	Dr. V. Sathyaraj	VI & VIII

HSOE17	Holistic Sports Education	-	Mr. Dalley Krishnan	VI & VIII
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ECONOMICS

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester
HSOE13	Entrepreneurship development	-	Dr. G. Nagasubramaniyan	VI & VIII

4. MINOR COURSES (Only B.Tech.)

ENGLISH

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester
-	-	-	-	-

ECONOMICS

Course Code	Course Name	Prerequisites	Name of the Faculty*	Semester
-	-	-	-	-

**DEPARTMENT OF INSTRUMENTATION AND CONTROL
ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI**

Date:

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech.

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
ICIR11	Introduction to Instrumentation and Control Systems Engineering	-	Dr. G. Uma	II	A & B
ICPC11	Thermodynamics and Fluid Mechanics	-	Faculty from Mechanical Engineering Dept.	II	A
ICPC11	Thermodynamics and Fluid Mechanics	-	Faculty from Mechanical Engineering Dept.	II	B
HSIR13	Industrial Economics and Foreign Trades	-	Faculty from Humanities and Social Sciences Dept.	IV	A
HSIR13	Industrial Economics and Foreign Trades	-	Faculty from Humanities and Social Sciences Dept.	IV	B
ICPC16	Control Systems-I	-	Dr. A. Ramakalyan	IV	A
ICPC16	Control Systems-I	-	Dr. K. Dhanalakshmi	IV	B

ICPC17	Analog Signal Processing	-	Dr. R.Periyasamy	IV	A
ICPC17	Analog Signal Processing	-	Dr. S. Narayanan	IV	B
ICPC18	Microprocessors and Microcontrollers	ICPC14	Dr. Geetha C	IV	A
ICPC18	Microprocessors and Microcontrollers	ICPC14	Dr. Shiraz Sohail	IV	B
ICLR12	Sensors and Transducers Laboratory	-	Dr. P A Karthick	IV	A
ICLR12	Sensors and Transducers Laboratory	-	Dr. Shiraz Sohail	IV	B
ICLR13	Analog Signal Processing Laboratory	-	Dr.R.Periyasamy	IV	A
ICLR13	Analog Signal Processing Laboratory	-	Dr. S. Narayanan	IV	B
ICIR19	Industrial Lecture	-	Dr. M. Umapathy	VI	A & B
ICPC23	Biomedical Instrumentation	-	Dr. V. Sridevi	VI	A
ICPC23	Biomedical Instrumentation	-	Dr. N. Sivakumaran	VI	A

ICPC24	Analytical Instrumentation	-	Dr. G R Bennet	VI	A & B
ICPC25	Logic and Distributed Control Systems	-	Dr. Sri Ram Shankar R	VI	A
ICPC25	Logic and Distributed Control Systems	-	Dr. K. Srinivasan	VI	B
HSIR14	Professional Ethics	-	Faculty from Humanities and Social Sciences Dept.	VI	A
HSIR14	Professional Ethics	-	Faculty from Humanities and Social Sciences Dept.	VI	B
ICLR16	Instrumentation Laboratory	-	ICE HoD	VI	A
ICLR16	Instrumentation Laboratory	-	Dr. Sri Ram Shankar R	VI	B
ICLR17	Industrial Automation and Process Control Laboratory	-	HoD/ICE	VI	A
ICLR17	Industrial Automation and Process Control Laboratory	-	HoD/ICE	VI	B
ICIR18	Comprehensive Viva-Voce Examination	-	HoD/ICE	VIII	A & B
ICIR17	Project Work	-	Dr. N. Sivakumaran / Dr. D.Ezhilarasi / Dr. Geetha C	VIII	A & B

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ICPE51	Numerical Methods	-	Faculty from Mathematics Dept.	IV
ICPE46	Engineering Mechanics	-	Faculty from Mechanical Engineering Dept.	IV
ICPE33	Power Electronics	-	Dr. B.Vasuki	IV
ICPE47	Internet of Things System Design	-	Dr. V. Sridevi	VI
ICPE49	Neural Networks and Fuzzy Logic	-	Dr. P A Karthick	VI
ICPE15	Instrumentation and Control for Power Plant	-	Dr. M. Umapathy	VI
ICPE31	Network Control Systems	-	HoD/ICE	VIII
ICPE26	System Identification	-	Dr. Rahul Kumar Sharma	VIII
ICPE50	Industrial Data Communication	ICPE38	HoD/ICE	VIII
ICPE20	Assistive Devices	-	Dr. P A Karthick	VIII

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ICMI13	Essentials of Control Engineering	-	HoD/ICE	

5. **HONOURS COURSES (For B.Tech.)**

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
ICHO13	Control System Design	ICPC16, ICPE19	Dr. Rahul Kumar Sharma	VI
ICHO14	Advanced Process Control	ICPC16, ICPC22	HoD/ICE	VIII

DEPARTMENT OF MANAGEMENT STUDIES
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date:

SUBMITTED TO THE DEAN (ACADEMIC):

LIST OF COURSES OFFERED IN January 2023 SESSION

Programme : B.Tech.

1. Open Electives

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

2. Minor Electives

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MBMI11	Management Concepts and Practices	Nil	Dr. Shobitha Poullose	III
MBMI15	Financial Management	Nil	Dr. Kirubakaran J	V
MBMI14	Productions and Operations Management	Nil	Dr. Yamini and Dr. Malolan	VIII

DEPARTMENT OF MECHANICAL ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date:

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
MEPC10	Engineering Mechanics	-NIL-	HOD/Mech	I	A
MEPC10	Engineering Mechanics	-NIL-	HOD/Mech	I	B
MAIR43	Fourier transforms and Numerical techniques	MAIR11, MAIR21	Mathematics Dept	IV	A
MAIR43	Fourier transforms and Numerical techniques	MAIR11, MAIR21	Mathematics Dept	IV	B
MEPC15	Mechanics of Machines – I	MEPC10	HOD/Mech	IV	A
MEPC15	Mechanics of Machines – I	MEPC10	HOD/Mech	IV	B
MEPC16	Manufacturing Technology	-NIL-	Production Dept	IV	A
MEPC16	Manufacturing Technology	-NIL-	Production Dept	IV	B
MEPC17	Thermal Engineering	MEPC11	HOD/Mech	IV	A
MEPC17	Thermal Engineering	MEPC11	HOD/Mech	IV	B

MELR13	Thermal Engineering Laboratory	-NIL-	HOD/Mech	IV	A
MELR13	Thermal Engineering Laboratory	-NIL-	HOD/Mech	IV	B
MELR14	Manufacturing Technology Laboratory	-NIL-	Production Dept	IV	A
MELR14	Manufacturing Technology Laboratory	-NIL-	Production Dept	IV	B
MEIR19	Industrial Lecture	-NIL-	HOD/Mech	VI	A
MEIR19	Industrial Lecture	-NIL-	HOD/Mech	VI	B
MEPC22	Automobile Engineering	-NIL-	HOD/Mech	VI	A
MEPC22	Automobile Engineering	-NIL-	HOD/Mech	VI	B
MEPC23	Energy Conversion systems	MEPC17	HOD/Mech	VI	A
MEPC23	Energy Conversion systems	MEPC17	HOD/Mech	VI	B
MEPC24	Design of Machine Elements	MEPC12, MEPC15	HOD/Mech	VI	A
MEPC24	Design of Machine Elements	MEPC12, MEPC15	HOD/Mech	VI	B
MELR17	Dynamics Laboratory	-NIL-	HOD/Mech	VI	A
MELR17	Dynamics Laboratory	-NIL-	HOD/Mech	VI	B

MELR18	Automobile Engineering Laboratory	-NIL-	HOD/Mech	VI	A
MELR18	Automobile Engineering Laboratory	-NIL-	HOD/Mech	VI	B
MEIR18	Comprehensive Viva Voce	-NIL-	HOD/Mech	VI	A
MEIR18	Comprehensive Viva Voce	-NIL-	HOD/Mech	VI	B

2. **PROGRAMME ELECTIVES**

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MEPE14	Biofuels	-NIL-	HOD/Mech	IV
MEPE22	MEMS Devices – Design and Fabrication	MEPC13	HOD/Mech	IV
MEPE30	Continuum Mechanics	MEPC12	HOD/Mech	IV
MEPE15	Refrigeration and Air Conditioning	MEPC17	HOD/Mech	VI
MEPE39	Industrial Safety engineering	-NIL-	HOD/Mech	VI
MEPE31	Mathematical Methods for Mechanical Engineers	MAIR43	HOD/Mech	VI
MEPE34	Additive Manufacturing	MEPC16	HOD/Mech	VI
MEPE21	Dynamics of Machinery	MEPC20	HOD/Mech	VIII
MEPE17	Cryogenic Engineering	MEPC17	HOD/Mech	VIII
MEPE38	Quality Control	-NIL-	HOD/Mech	VIII

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MEOE17	Energy Conservation and Management	-NIL-	HOD/Mech	IV, VI, VIII

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MEMI22	Dynamics	-NIL-	HOD/Mech	IV, VI, VIII

5. HONOURS COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MEHO19	Analysis of Thermal Power Cycles	MEPC17	HOD/Mech	VI, VIII

**DEPARTMENT OF METALLURGICAL AND MATERIALS
ENGINEERING**
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date: 23-12-2022

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

**Programme : B.Tech. Metallurgical and Materials
Engineering**

1. GIR, ELR, CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MTIR18	Comprehensive Viva Voce	NIL	Prof. B. Ravisankar + Dr. D. Nagarajan	VIII
MTIR19	Project Work	NIL	Prof. S. Kumaran	VIII
MTPC22	Non-Ferrous Metallurgy	MTPC12	Dr. S. Jerome	VI
MTPC23	Material Characterization	NIL	Dr. G. Vinoth Kumar	VI
MTPC24	Corrosion Engineering	NIL	Dr. Illa Mani Pujitha	VI
MTLR36	Non-Ferrous Metallography and Characterization Laboratory	MTPC22, MTPC23	Dr. Illa Mani Pujitha + Dr. G. Vinoth Kumar	VI
MTLR37	Corrosion and Surface Engineering Laboratory	MTPC24	Prof. S.P. Kumaresh Babu + Dr. A. Muthuchamy	VI
MTIR17	Industrial Lecture	NIL	Dr. V. Karthik	VI
MAIR44	Partial Differential Equations and Numerical Methods	NIL	Mathematics Dept	IV
MTPC15	Phase Transformation and Heat Treatment	MTPC12	Dr. A. Muthuchamy	IV

MTPC16	Transport Phenomena	NIL	Dr. V. Karthik	IV
MTPC17	Mechanical Behaviour and Testing of Materials	MTPC12	Dr. Prince Gideon	IV
MTLR32	Metallography and Heat Treatment Laboratory	MTPC15	Dr. D. Nagarajan + Dr. S. Anand	IV
MTLR33	Materials Testing and Inspection Laboratory	MTPC17	Dr. Prince Gideon	IV
MTPC10	Engineering Mechanics and Strength of Materials	NIL	Prof. B. Ravisankar + Prof. S. Muthukumaran	II

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MTPE04	Special Steels and Cast Irons	MTPC15	Dr. G. Vinoth Kumar	VI & VIII
MTPE11	Materials for New and Renewable Energy	NIL	Dr. Illa Mani Pujitha	VIII
MTPE20	Ceramic Materials	NIL	Prof. N. Ramesh Babu	IV & VIII
MTPE21	Ceramic Processing	MTPC14	Dr. Nimu Chand Reger	VI & VIII
MTPE03	Fatigue, Creep and Fracture Mechanics	MTPC17	Prof. K. Sivaprasad	VI
MTPE12	Non-Ferrous Extraction	NIL	Dr. S. Anand	IV

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MTOE14	Introduction to Quality Management	NIL	Prof. S. Raman Sankaranarayanan	VI & VIII
MTOE16	Process Modelling and Applications	NIL	Dr. S. Anand	VIII

MTOE18	Business and Entrepreneurship for Engineers	NIL	Prof. S. Raman Sankaranarayanan	VI & VIII
MTOE11	Mathematical Techniques in Materials Research	NIL	Dr. Prince Gideon	VI

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
	NIL			

5. HONOURS COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester
MTHO15	Advanced Solidification Processing	MTPC19	Prof. S.P. Kumaresh Babu	VI & VIII

DEPARTMENT OF PHYSICS
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date:

LIST OF COURSES OFFERED IN JANUARY 2023 SESSION

Programme : B.Tech.

1. GIR, ELR AND CORE COURSES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
PHIR11	Physics I	NIL	Dr. B. Karthikeyan	II	PROD-A
PHIR11	Physics I	NIL	Dr. M. C. Santhosh Kumar	II	PROD-B
PHIR11	Physics I	NIL	Dr. R. Justin Joseyphus	II	MECH-A
PHIR11	Physics I	NIL	Dr. R. Nagalakshmi	II	MECH-B
PHIR11	Physics I	NIL	Dr. Chandra Bose	II	CIVIL A
PHIR11	Physics I	NIL	Dr. N.V. Giridharan	II	CIVIL B
PHIR11	Physics I	NIL	Dr. S. Manivannan	II	MME
PHIR11	Physics I	NIL	Dr.C. Roobala	II	CHEM
PHIR12	Physics Lab	Nil	HODPHY/TA	II	All sections

2. PROGRAMME ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

3. OPEN ELECTIVES

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

4. MINOR COURSES (For B.Tech.)

Course Code	Course Name	Prerequisites	Name of the Faculty	Semester

DEPARTMENT OF PRODUCTION ENGINEERING
NATIONAL INSTITUTE OF TECHNOLOGY: TIRUCHIRAPPALLI

Date:02-1-2023

LIST OF COURSES OFFERED IN JAN 2023 SESSION

Programme : B.Tech.(Production Engineering)

1. GIR, ELR, CORE COURSES

Section	Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
A-Prod	PRPC10	Applied Mechanics	-	Dr.V.Satheeshkumar	II	A-Prod
B-Prod	PRPC10	Applied Mechanics	-	Dr.Prakash Kumar	II	B-Prod
A-Prod	ENIR 11	Energy and Environmental Engineering	-	DEE	II	A-Prod
B-Prod	ENIR 11	Energy and Environmental Engineering	-	DEE	II	B-Prod
A-CSE	MEIR12	Engineering Graphics	-	HOD/PROD	II	A-CSE
B-CSE	MEIR12	Engineering Graphics	-	Dr.M.Vasu	II	B-CSE
A-EEE	MEIR12	Engineering Graphics	-	HOD/PROD	II	A-EEE
B-EEE	MEIR12	Engineering Graphics	-	HOD/PROD	II	B-EEE
CL	PRIR11	Engineering Practice	-	HOD/PROD	II	CL
A & B-CIVIL	PRIR11	Engineering Practice	-	Dr.C.Sathiya Narayanan	II	A & B-CIVIL
A-MECH	PRIR11	Engineering Practice	-	Dr.V.Satheeshkumar	II	A-MECH
B-MECH	PRIR11	Engineering Practice	-	Dr.V.Anandakrishnan	II	B-MECH

A- PROD	PRIR11	Engineering Practice	-	Dr.P.Sathiya	II	A - PROD
B- PROD	PRIR11	Engineering Practice	-	HOD/PROD	II	B - PROD
MME	PRIR11	Engineering Practice	-	HOD/PROD	II	MME
A	MAIR47	Probability & Statistics	-	Maths	IV	A
B	MAIR47	Probability & Statistics	-	Maths	IV	B
A	PRPC15	Kinematics and Dynamics of Machines	-	Dr.Matruprasad Rout	IV	A
B	PRPC15	Kinematics and Dynamics of Machines	-	Dr.T Jagadesh	IV	B
A	PRPC16	Metrology, Quality and Safety	-	Dr.V.Anandakrishnan	IV	A
B	PRPC16	Metrology, Quality and Safety	-	Dr.D.Lenin Singaravelu	IV	B
A	PRPC17	Computer Numerical Control (CNC) Systems	-	Dr.J.Jerald	IV	A
B	PRPC17	Computer Numerical Control (CNC) Systems	-	Dr.Vineet Kumar Yadav	IV	B
B	PRLR12	Metrology and Computer Numerical Control Machines Lab.	-	Dr.V.Anandakrishnan	IV	B
A	PRLR12	Metrology and Computer Numerical Control	-	Dr.J.Jerald	IV	A

		Machines Lab.				
A	PRLR13	Machine Drawing (CAD) and Cost Estimation	-	Dr.Matruprasad Rout	IV	A
B	PRLR13	Machine Drawing (CAD) and Cost Estimation	-	HOD/PROD	IV	B
A &B	XXIR17	Industrial Lecture	-	Dr.D.Lenin Singaravelu	VI	A &B
A	PRPC22	Operations Research	-	Dr.P.Parthiban	VI	A
B	PRPC22	Operations Research	-	Dr.R. Jeyapaul	VI	B
A	PRPC23	Analysis of Production Systems	-	Dr.Santosh Mishra	VI	A
B	PRPC23	Analysis of Production Systems	-	HOD/PROD	VI	B
A	PRPC24	Computer Aided Design and Rapid Prototyping	-	Dr.P.Senthil	VI	A
B	PRPC24	Computer Aided Design and Rapid Prototyping	-	Dr.S.Vinodh	VI	B
A	PRLR17	Advanced Manufacturing Lab.	-	HOD/PROD/Dr.P.Senthil	VI	A
B	PRLR17	Advanced Manufacturing Lab.	-	HOD/PROD/Dr.S.Vinodh	VI	B
A &B	PRLR18	Industrial Engineering Lab.	-	Dr.M.Vasu	VI	A &B
A &B	HSIR 13	Industrial Economics and Foreign trade	-	HOD/PROD	VIII	A &B

2. PROGRAMME ELECTIVES

Section	Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	
A &B-Prod	PRPE28	Unconventional Machining Processes(2019-batch-Elective 2 & 3)	-	HOD/PROD	IV	A &B-Prod
A &B	PRPE15	Industrial Robotics (2019-batch-Elective 2 & 3)	-	HOD/PROD	IV	A &B
A &B	PRPE13	Finite Element Methods for Engineers (Elective 5,6 & 7)	-	Dr.V.Senthilkumar	VI	A &B
A &B	PRPE20	Design and Analysis of Experiments(Elective 5,6 & 7)	-	Dr.R. Jeyapaul	VI	A &B
A &B	PRPE35	Work Design and Facilities Planning (Elective 5,6 & 7)	-	HOD/PROD	VI	A &B
A &B	PRPE32	Non Destructive Testing(Elective 12, 13 & 14)	-	HOD/PROD	VIII	A &B

3. OPEN ELECTIVES

Section	Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	
OPEN	PROE11	Project Management(Non-Circuit)(Elective 12, 13 & 14)	-	HOD/PROD	VIII	OPEN
OPEN	PROE11	Project Management(Circuit)(Elective 12, 13 & 14)	-	HOD/PROD	VIII	OPEN
OPEN	PROE18	Micro and Nano Manufacturing Processes (Elective 12, 13 & 14)	-	HOD/PROD	VIII	OPEN

4. MINOR COURSES (For B.Tech.)

Section	Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	
OPEN	PRMI11	CAD, CAM and CAE(minor-4)	-	HOD/PROD	IV	OPEN
OPEN	PRMI13	Industrial Engineering and Management(minor-5)	-	HOD/PROD	VIII	OPEN

5. HONOURS COURSES (For B.Tech.)

Section	Course Code	Course Name	Prerequisites	Name of the Faculty	Semester	Section
A &B	PRHO11	Robotics (HO2)	-	Dr.Santosh Mishra	VI	A &B
A &B	PRHO16	Knowledge Management (HO3)	-	HOD/PROD	VIII	A &B
A &B	PRHO19	Multi - Criteria Decision Making Techniques	-	Dr.P.Asokan	VIII	A &B