

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING**

Regulation: R18

First Year First Semester

B.TECH I YEAR I SEM EEE (R18)

Course Name: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vectors	L5
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L5
MA101BS.4	Solve the applications on the mean value theorems.	L4
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L3
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L3
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L5

B.TECH I YEAR I SEM ECE (R18)

Course Name: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE103ES.1	Understand and analyze basic Electrical circuits	L2
EE103ES.2	Study the working principles of Electrical Machines and Transformers	L2
EE103ES.3	Introduce components of Low Voltage Electrical Installations.	L3




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi &amp; Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472521, +91 9842708545, +91 9889939556.

**B.TECH I YEAR I SEMECE (R18)**

Course Name: Engineering Workshop

Course Code: ME105ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME105ES.1	Study and practice on machine tools and their operations	L2
ME105ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME105ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME105ES.4	Apply basic electrical engineering knowledge for house wiring practice.	L3

**B.TECH I YEAR I SEM EEE (R18)**

A.Y:20 - 20

Course Name: ENGLISH

Course Code: EN105HS

Course Outcome No	Course Outcome Statement	B.T Level
EN105HS.1	Use English Language effectively in spoken and written forms	L3
EN105HS.2	Comprehend the given texts and respond appropriately.	L2
EN105HS.3	Communicate confidently in various contexts and different cultures.	L2
EN105HS.4	Acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.	L2



*Y. Jagan-1-*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.


**MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail : mtec86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989918556

B.TECH I YEAR I SEM EEE (R18)

 Course Name: **ENGINEERING CHEMISTRY LABORATORY** Course Code : CH106BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH106BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH106BS.2	Able to perform methods such as conductometry, potentiometric and pH merry in order to find out the concentrations or equivalence points of acids and bases	L2
CH106BS.3	Students are able to prepare polymers like bake lite and nylon-6.	L2
CH106BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3

B.TECH I YEAR I SEM EEE (R18)

 Course Name: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN107HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN107HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN107HS.2	Neutralize their accent for intelligibility	L2
EN107HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3



Y. Prasad -  
 PRINCIPAL  
 MOTHER THERESA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.









B.TECH I YEAR II SEM EEE (R18)

A.Y:20 - 20

Course Name: APPLIED PHYSICS

Course Code: AP202BS

Course Outcome No	Course Outcome Statement	B.T Level
AP202BS.1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	L2
AP202BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	L2
AP202BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	L3
AP202BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials	L2

B.TECH I YEAR II SEM EEE (R18)

A.Y:20 - 20

Course Name: PROGRAMMING FOR PROBLEM SOLVING

Course Code: AP205BS

Course Outcome No	Course Outcome Statement	B.T Level
AP205BS.1	To write algorithms and to draw flowcharts for solving problems.	L3
AP205BS.2	To convert the algorithms/flowcharts to C programs	L3
AP205BS.3	To code and test a given logic in C programming language.	L4
AP205BS.4	To use arrays, pointers, strings and structures to write C programs	L3
AP205BS.5	Searching and sorting problems.	L2

B.TECH I YEAR II SEM EEE (R18)

A.Y:20 - 20

Course Name: ENGINEERING GRAPHICS

Course Code: ME204ES

Course Outcome No	Course Outcome Statement	B.T Level
ME204ES.1	Preparing working drawings to communicate the ideas and information.	L2
ME204ES.2	Read, understand and interpret engineering drawings.	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtes.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9988099556.

**B.TECH I YEAR I SEM EEE (R18)**
**Course Name: APPLIED PHYSICS LABORATORY**
**Course Code: AP205BS**


Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP205BS.1	Know the determination of the Planck's constant using Photo electric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
AP205BS.2	Appreciate quantum physics in semiconductor devices and optoelectronics.	L2
AP205BS.3	Gain the knowledge of applications of dielectric constant	L2
AP205BS.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
AP205BS.5	Carried out data analysis	L2

**B.TECH I YEAR II SEM EEE (R18)**
**Course Name: PROGRAMMING FOR PROBLEM SOLVING LAB**
**Course Code: CS106E**

Course Outcome No	Course Outcome Statement	B.T Level
CS106E.1	formulate the algorithms for simple problems	L3
CS106E.2	translate given algorithms to a working and correct program	L3
CS106E.3	correct syntax errors as reported by the compiler	L5
CS106E.4	identify and correct logical errors encountered during execution	L5
CS106E.5	represent and manipulate data with arrays, strings and structure	L2



*Yrassu 1-*  
 PRINCIPAL  
 MOTHER THERESSA  
 COLLEGE OF ENGINEERING & TECHNOLOGY  
 PEDDAPALLI-505174.

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472623, +91 9842709545, +91 9989959556.		

**B.TECH I YEAR IISEM EEE (R18)**

Course Name: ENVIRONMENTAL SCIENCE Course Code: MC109ES

Course Outcome No	Course Outcome Statement	B.T Level
MC109ES.1	Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development	L2

**Second Year First Semester**

**B.TECH II YEAR I SEM EEE (R18)**

Course Name: ELECTROMAGNETIC FIELDS Course Code: EE305PC

Course Outcome No	Course Outcome Statement	B.T Level
EE305PC.1	To understand the basic laws of electromagnetism.	L2
EE305PC.2	To obtain the electric and magnetic fields for simple configurations under static conditions.	L2
EE305PC.3	To analyze time varying electric and magnetic fields	L3
EE305PC.4	To understand Maxwell's equation in different forms and different media.	L2
EE305PC.5	To understand the propagation of EM waves.	L3



  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 P.P. Colony



**B.TECH II YEAR I SEM EEE (R18)**

Course Name: MACHINES LAB – I

Course Code: EE306PC

Course Outcome No	Course Outcome Statement	B.T Level
EE306PC.1	Start and control the Different DC Machines.	L2
EE306PC.2	Assess the performance of different machines using different testing methods	L3
EE306PC.3	Identify different conditions required to be satisfied for self - excitation of DC Generators.	L2
EE306PC.4	Separate iron losses of DC machines into different components	L3

**B.TECH II YEAR I SEM EEE (R18)**

Course Name: ANALOG ELECTRONICS LAB

Course Code: EE307PC

Course Outcome No	Course Outcome Statement	B.T Level
EE307PC.1	Know the characteristics, utilization of various components.	L2
EE307PC.2	Understand the biasing techniques	L3
EE307PC.3	Design and analyze various rectifiers, small signal amplifier circuits.	L3
EE307PC.4	Design sinusoidal and non-sinusoidal oscillators.	L3
EE307PC.5	A thorough understanding, functioning of OP-AMP, designs OP-AMP based circuits with linear integrated circuits.	L2



*Y. Srinivasulu Reddy*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**B.TECH II YEAR I SEM EEE (R18)**

Course Name: ELECTRICAL CIRCUITS LAB

Course Code: EE308PC

Course Outcome No	Course Outcome Statement	B.T Level
EE308PC.1	Analyze complex DC and AC linear circuits	L4
EE308PC.2	Apply concepts of electrical circuits across engineering	L3
EE308PC.3	Evaluate response in a given network by using theorems	L5

**B.TECH II YEAR II SEM EEE (R18)**

Course Name: DIGITAL ELECTRONICS LAB

Course Code: EE406PC

Course Outcome No	Course Outcome Statement	B.T Level
EE406PC.1	Understand working of logic families and logic gates.	L2
EE406PC.2	Design and implement Combinational and Sequential logic circuits.	L3
EE406PC.3	Understand the process of Analog to Digital conversion and Digital to Analog conversion.	L2
EE406PC.4	Be able to use PLDs to implement the given logical problem.	L4



Y. Praveen -  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**B.TECH II YEAR II SEM EEE(R18)**

Course Name: ELECTRICAL MACHINES LAB – II

Course Code: EE407PC

Course Outcome No	Course Outcome Statement	B.T Level
EE407PC.1	Assess the performance of different machines using different testing method	L2
EE407PC.2	To convert the Phase from three phase to two phase and vice versa	L3
EE407PC.3	Compensate the changes in terminal voltages of synchronous generator after estimating the change by different methods	L2
EE407PC.4	Control the active and reactive power flows in synchronous machine	L3

**B.TECH II YEAR I SEM EEE (R18)**

Course Name: GENDER SENSITIZATION LAB

Course Code: MC309

Course Outcome No	Course Outcome Statement	B.T Level
MC309.1	Students will have developed a better understanding of important issues related to gender in contemporary India	L2
MC309.2	Students will attain a finer grasp of how gender discrimination works in our society and how to counter it.	L2
MC309.3	Students will acquire insight into the gendered division of labor and its relation to politics and economics.	L2
MC309.4	Men and women students and professionals will be better equipped to work and live together as equals.	L2





**Second Year Second Semesters****B.TECH II YEAR II SEM EEE (R18)****Course Name: LAPLACE TRANSFORMS, NUMERICAL METHODS****AND COMPLEX VARIABLES****Course Code: MA401BS**

Course Outcome No	Course Outcome Statement	B.T Level
MA401BS.1	Use the Laplace transforms techniques for solving ODE's	L3
MA401BS.2	Find the root of a given equation.	L3
MA401BS.3	Estimate the value for the given data using interpolation	L5
MA401BS.4	Find the numerical solutions for a given ODE's	L3

**B.TECH II YEAR II SEM EEE (R18)****Course Name: ELECTRICAL MACHINES – II****Course Code: MC309**

Course Outcome No	Course Outcome Statement	B.T Level
EE402PC.1	Understand the concepts of rotating magnetic fields	L2
EE402PC.2	Understand the operation of ac machines.	L2
EE402PC.3	Analyze performance characteristics of ac machine	L4



*Greeny*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

**B.TECH II YEAR II SEM EEE (R18)****Course Name: DIGITAL ELECTRONICS****Course Code: EE403PC**

Course Outcome No	Course Outcome Statement	B.T Level
EE403PC.1	Understand working of logic families and logic gates.	L2
EE403PC.2	Design and implement Combinational and Sequential logic circuits.	L3
EE403PC.3	Understand the process of Analog to Digital conversion and Digital to Analog conversion.	L2
EE403PC.4	Be able to use PLDs to implement the given logical problem.	L3

**B.TECH II YEAR II SEM EEE (R18)****Course Name: CONTROL SYSTEMS****Course Code: EE404PC**

Course Outcome No	Course Outcome Statement	B.T Level
EE404PC.1	Understand the modeling of linear-time-invariant systems using transfer function and state space representations	L2
EE404PC.2	Understand the concept of stability and its assessment for linear-time invariant systems.	L2
EE404PC.3	Design simple feedback controllers.	L3



**B.TECH II YEAR II SEM EEE (R18)**

Course Name: POWER SYSTEM - I

Course Code: EE405PC

Course Outcome No	Course Outcome Statement	B.T Level
EE405PC.1	Understand the concepts of power systems.	L2
EE405PC.2	Understand the operation of conventional generating stations and renewable sources of electrical power.	L2
EE405PC.3	Evaluate the power tariff method	L3
EE405PC.4	Determine the electrical circuit parameters of transmission lines	L4
EE405PC.5	Understand the layout of substation and underground cables and corona.	L2

**B.TECH II YEAR II SEM EEE (R18)**

Course Name: CONTROL SYSTEMS LAB

Course Code: EE408PC

Course Outcome No	Course Outcome Statement	B.T Level
EE408PC.1	How to improve the system performance by selecting a suitable controller and/or a compensator for a specific application	L2
EE408PC.2	Apply various time domain and frequency domain techniques to assess the system performance	L3
EE408PC.3	Apply various control strategies to different applications (example: Power systems, electrical drives etc)	L3





### Third Year First Semesters

#### B.TECH III YEAR I SEM EEE (R18)

Course Name: POWER ELECTRONICS      Course Code: EE501PE

Course Outcome No	Course Outcome Statement	B.T Level
EE501PE.1	Understand the differences between signal level and power level devices.	L2
EE501PE.2	Analyze controlled rectifier circuits	L4
EE501PE.3	Analyze the operation of DC-DC choppers	L4
EE501PE.4	Analyze the operation of voltage source inverters.	L4

#### B.TECH III YEAR I SEM EEE (R18)

Course Name: POWER SYSTEM – II      Course Code: EE502PE

Course Outcome No	Course Outcome Statement	B.T Level
EE502PE.1	Analyze transmission line performance.	L4
EE502PE.2	Apply load compensation techniques to control reactive power	L3
EE502PE.3	Understand the application of per unit quantities.	L2
EE502PE.4	Design over voltage protection and insulation coordination	L3
EE502PE.5	Determine the fault currents for symmetrical and unbalanced fault	L3



*Y. Suresh*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**B.TECH III YEAR I SEM EEE (R18)**

**Course Name:** MEASUREMENTS AND INSTRUMENTATION

**Course Code:** EE503PE

Course Outcome No	Course Outcome Statement	B.T Level
EE503PE.1	Understand different types of measuring instruments, their construction, operation and characteristics	L2
EE503PE.2	Identify the instruments suitable for typical measurement	L2
EE503PE.3	Apply the knowledge about transducers and instrument transformers to use them effectively.	L3

**B.TECH III YEAR I SEM EEE (R18)**

**Course Name:** COMPUTER ARCHITECTURE (Professional Elective - I)

**Course Code:** EE511P

Course Outcome No	Course Outcome Statement	B.T Level
EE511PE.1	Understand the concepts of microprocessors, their principles and practices.	L2
EE511PE.2	Write efficient programs in assembly language of the 8086 family of microprocessors	L3
EE511PE.3	Organize a modern computer system and be able to relate it to real examples.	L2
EE511PE.4	Develop the programs in assembly language for 80286, 80386 and MIPS processors in real and protected modes.	L2



**B.TECH III YEAR I SEM EEE (R18)****Course Name:** HIGH VOLTAGE ENGINEERING (Professional Elective-I) **Course Code:** EE512PE


Course Outcome No	Course Outcome Statement	B.T Level
EE512PE.1	Understand the basic physics related to various breakdown processes in solid, liquid and gaseous insulating materials.	L2
EE512PE.2	Knowledge of generation and measurement of D. C., A.C., & Impulse voltages	L1
EE512PE.3	Knowledge of tests on H. V. equipment and on insulating materials, as per the standards.	L1
EE512PE.4	Knowledge of how over-voltages arise in a power system, and protection against these overvoltages.	L1

**B.TECH III YEAR I SEM EEE (R18)****Course Name:** ELECTRICAL MACHINE DESIGN (Professional Elective - I) **Course Code:** EE513PE

Course Outcome No	Course Outcome Statement	B.T Level
EE513PE.1	Understand the construction and performance characteristics of electrical machines.	L2
EE513PE.2	Understand the various factors which influence the design: electrical, magnetic and thermal loading of electrical machine	L2
EE513PE.3	Understand the principles of electrical machine design and carry out a basic design of an ac machine.	L2
EE513PE.4	Use software tools to do design calculations.	L3





Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
	<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)	
P.P.Colony (Po.), Peddabonkuruz (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.		
Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709548, +91 9889969886.		

**B.TECH III YEAR I SEM EEE (R18)**

**Course Name:** BUSINESS ECONOMICS AND FINANCIAL ANALYSIS **Course Code:** SM504MS

Course Outcome No	Course Outcome Statement	B.T Level
SM504MS	The students will understand the various Forms of Business and the impact of economic variables on the Business. The Demand, Supply, Production, Cost, Market Structure, Pricing aspects are learnt. The Students can study the firm's financial position by analysing the Financial Statements of a company	L2

**B.TECH III YEAR I SEM EEE (R18)**

**Course Name:** POWER SYSTEM SIMULATION LAB **Course Code:** EE505PC

Course Outcome No	Course Outcome Statement	B.T Level
EE505PC.1	Perform various transmission line calculations	L3
EE505PC.2	Understand Different circuits time constants	L2
EE505PC.3	Analyze the experimental data and draw the conclusions.	L4



*Green*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

**B.TECH III YEAR I SEM EEE (R18)****Course Name: POWER ELECTRONICS LAB****Course Code: EE506PC**

Course Outcome No	Course Outcome Statement	B.T Level
EE506PC.1	Understand the operating principles of various power electronic converters.	L2
EE506PC.2	Use power electronic simulation packages & hardware to develop the power converters.	L3
EE506PC.3	Analyze and choose the appropriate converters for various applications	L4

**B.TECH III YEAR I SEM EEE (R18)****Course Name: MEASUREMENTS AND INSTRUMENTATION LAB****Course Code: EE507PC**

Course Outcome No	Course Outcome Statement	B.T Level
EE507PC.1	to choose instruments	L2
EE507PC.2	test any instrument	L3
EE507PC.3	find the accuracy of any instrument by performing experiment	L4
EE507PC.4	calibrate PMMC instrument using D.C potentiometer	L3



*Y. Praveen*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



### Third Year Second Semesters

B.TECH III YEAR II SEM EEE (R18)


Course Name: OPTIMIZATION TECHNIQUES (Professional Elective - III) Course Code: EE611PE

Course Outcome No	Course Outcome Statement	B.T Level
EE611PE.1	explain the need of optimization of engineering systems	L2
EE611PE.2	understand optimization of electrical and electronics engineering problems	L2
EE611PE.3	apply classical optimization techniques, linear programming, simplex algorithm, transportation problem	L3
EE611PE.4	apply unconstrained optimization and constrained non-linear programming and dynamic programming	L3
EE611PE.5	Formulate optimization problems	L2



*Y. Sreenivasulu Reddy*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdt. & Dist.) - 505174, Telangana State. Website : www.mtc06.ac.in E-mail: mtc06@gmail.com Contact : +91 9849472521, +91 9842709545, +91 9899095556		

**B.TECH III YEAR II SEM EEE (R18)**

**Course Name:** POWER SEMICONDUCTOR DRIVES (Professional Elective – II)

**Course Code:** EE612PE

Course Outcome No	Course Outcome Statement	B.T Level
EE612PE.1	Identify the drawbacks of speed control of motor by conventional methods	L2
EE612PE.2	Differentiate Phase controlled and chopper-controlled DC drives speed-torque characteristics merits and demerits	L2
EE612PE.3	Understand Ac motor drive speed–torque characteristics using different control strategies its merits and demerits	L2
EE612PE.4	Describe Slip power recovery schemes	L2

**B.TECH III YEAR II SEM EEE (R18)**

**Course Name:** WIND AND SOLAR ENERGY SYSTEMS (Professional Elective - II)

**Course Code:** EE613PE

Course Outcome No	Course Outcome Statement	B.T Level
EE613PE.1	Understand the energy scenario and the consequent growths of the power generate renewable energy sources.	L2
EE613PE.2	Understand the basic physics of wind and solar power generation.	L2
EE613PE.3	Understand the power electronic interfaces for wind and solar generation	L2



**B.TECH III YEAR II SEM EEE (R18)****Course Name: SIGNALS AND SYSTEMS****Course Code: EE601PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE601PC.1	Differentiate various signal functions.	L1
EE601PC.2	Represent any arbitrary signal in time and frequency domain.	L3
EE601PC.3	Understand the characteristics of linear time invariant systems	L2
EE601PC.4	Analyze the signals with different transform technique	L4

**B.TECH III YEAR II SEM EEE (R18)****Course Name: MICROPROCESSORS & MICROCONTROLLERS****Course Code: EE602PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE602PC.1	Understands the internal architecture, organization and assembly language programming of 8086 processors	L2
EE602PC.2	Understands the internal architecture, organization and assembly language programming of 8051/controllers	L2
EE602PC.3	Understands the interfacing techniques to 8086 and 8051 based systems	L2
EE602PC.4	Understands the internal architecture of ARM processors and basic concepts of advanced ARM processors.	L2



**B.TECH III YEAR II SEM EEE (R18)****Course Name: POWER SYSTEM PROTECTION****Course Code: EE603PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE603PC.1	Compare and contrast electromagnetic, static and microprocessor-based relays.	L1
EE603PC.2	Apply technology to protect power system components.	L3
EE603PC.3	Select relay settings of over current and distance relays.	L3
EE603PC.4	Analyze quenching mechanisms used in air, oil and vacuum circuit breakers	L4

**B.TECH III YEAR II SEM EEE (R18)****Course Name: POWER SYSTEM OPERATION AND CONTROL****Course Code: EE604PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE604PC.1	Understand operation and control of power systems	L2
EE604PC.2	Analyze various functions of Energy Management System (EMS) functions.	L4
EE604PC.3	Analyze whether the machine is in stable or unstable position.	L4
EE604PC.4	Understand power system deregulation and restructuring	L2






**B.TECH III YEAR II SEM EEE (R18)****Course Name: POWER SYSTEM LAB****Course Code: EE605PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE605PC.1	Perform various load flow techniques	L3
EE605PC.2	Understand Different protection method	L2
EE605PC.3	Analyze the experimental data and draw the conclusions.	L4

**B.TECH III YEAR II SEM EEE (R18)****Course Name: SIGNALS AND SYSTEMS LAB****Course Code: EE607PC**

Course Outcome No	Course Outcome Statement	B.T Level
EE607PC.1	Understand the concepts of continuous time and discrete time systems.	L2
EE607PC.2	Analyse systems in complex frequency domain	L4
EE607PC.3	Understand sampling theorem and its implications.	L2



Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989938556		

B.TECH III YEAR II SEM EEE (R18)

A.Y: 2022-2023

Course Name: MICROPROCESSORS AND MICROCONTROLLERS LAB

Course Code: EE606PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE606PC.1	Design and implement programs on 8085 microprocessor.	L2
EE606PC.2	Design and implement programs on 8086 microprocessor.	L2
EE606PC.3	Design interfacing circuits with 8085.	L2
EE606PC.4	Design interfacing circuits with 8086.	L2

#### Fourth Year First Semester

B.TECH IV YEAR I SEM EEE (R18)

Course Name: DIGITAL CONTROL SYSTEMS (PE – III)

Course Code: EE711PE

Course Outcome No	Course Outcome Statement	B.T Level
EE711PE.1	Obtain discrete representation of LTI systems	L2
EE711PE.2	Analyze stability of open loop and closed loop discrete-time systems.	L4
EE711PE.3	Design and analyze digital controllers.	L3
EE711PE.4	Design state feedback and output feedback controllers.	L3



  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

**B.TECH IV YEAR I SEM EEE (R18)****Course Name: DIGITAL SIGNAL PROCESSING (PE – III)****Course Code: EE712PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE712PE.1	Understand the LTI system characteristics and Multirate signal processing.	L2
EE712PE.2	Understand the inter-relationship between DFT and various transforms.	L2
EE712PE.3	Design a digital filter for a given specification.	L3
EE712PE.4	Understand the significance of various filter structures and effects of round off errors	L2

**B.TECH IV YEAR I SEM EEE (R18)****Course Name: ELECTRICAL AND HYBRID VEHICLES (PE – III)****Course Code: EE713PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE713PE.1	Understand the models to describe hybrid vehicles and their performance.	L2
EE713PE.2	Understand the different possible ways of energy storage	L2
EE713PE.3	Understand the different strategies related to energy storage systems.	L2



*Y. Srinivas*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 85

**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY***(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec85.ac.in E-mail: mtec.85@gmail.com Contact : +91 9849472523, +91 9542709045, +91 9062955506.

**B.TECH IV YEAR I SEM EEE (R18)****Course Name: HVDC TRANSMISSION (PE – IV)****Course Code: EE721PE**


Course Outcome No	Course Outcome Statement	B.T Level
EE721PE.1	Compare EHV AC and HVDC system and to describe various types of DC links	L1
EE721PE.2	Analyze Graetz circuit for rectifier and inverter mode of operation	L4
EE721PE.3	Describe various methods for the control of HVDC systems and to perform power flow analysis in AC/DC systems	L2
EE721PE.4	Describe various protection methods for HVDC systems and classify Harmonics and design different types of filters	L2

**B.TECH IV YEAR I SEM EEE (R18)****Course Name: POWER SYSTEM RELIABILITY (PE – IV)****Course Code: EE722PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE722PE.1	Estimate loss of load and energy indices for generation systems model	L3
EE722PE.2	Describe merging generation and load models	L2
EE722PE.3	Apply various indices for distribution systems	L3
EE722PE.4	Evaluate reliability of interconnected systems	L3



*Francis*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 85
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec85.ac.in E-mail: mtec.85@gmail.com Contact : +91 9849472223, +91 9542709545, +91 9899900530.		

**B.TECH IV YEAR I SEM EEE (R18)**

**Course Name:** INDUSTRIAL ELECTRICAL SYSTEMS (PE – IV)      **Course Code:** EE723PE

Course Outcome No	Course Outcome Statement	B.T Level
EE723PE.1	Understand the electrical wiring systems for residential, commercial and industrial consumers, representing the systems with standard symbols and drawings, SLD.	L2
EE723PE.2	Understand various components of industrial electrical systems.	L2
EE723PE.3	Analyze and select the proper size of various electrical system components.	L4

**B.TECH IV YEAR I SEM EEE (R18)**

**Course Name:** FUNDAMENTALS OF MANAGEMENT FOR ENGINEERS      **Course Code:** SM701MS

Course Outcome No	Course Outcome Statement	B.T Level
SM701MS	The students understand the significance of Management in their Profession. The various Management Functions like Planning, Organizing, Staffing, Leading, Motivation and Control aspects are learnt in this course. The students can explore the Management Practices in their domain area	L2



  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**B.TECH IV YEAR I SEM EEE (R18)**

Course Name: ELECTRICAL &amp; ELECTRONICS DESIGN LAB

Course Code: EE701PC

Course Outcome No	Course Outcome Statement	B.T Level
EE701PC.1	Get practical knowledge related to electrical	L1
EE701PC.2	Fabricate basic electrical circuit elements/network	L3
EE701PC.3	Trouble shoot the electrical circuits	L2
EE701PC.4	Design filter circuit for application	L3
EE701PC.5	Get hardware skills such as soldering, winding etc	L2

**B.TECH IV YEAR I SEM ECE (R18)**

Course Name: INDUSTRY ORIENTED MINI PROJECT

Course Code: EE702PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE702PC.1	Design identifies basic requirement for an application and process a effective solution.	L2
EE702PC.2	Build knowledge through practical assignments and learn the various design methods for solving problems.	L2
EE702PC.3	Develop skill to build design techniques for various problem analyses.	L2
EE702PC.4	Summarize the fundamental concepts and techniques used in mini project.	L2



*Yaswanth*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**



Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>		
(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)		
P.P.Colony (Po.), Peddapalkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.		
Website : www.mtec86.ac.in    E-mail: mtec.86@gmail.com    Contact : +91 9948472523, +91 9542709345, +91 9999999556.		

B.TECH IV YEAR I SEM ECE (R18)

Course Name: SEMINAR

Course Code: EE703PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE703PC.1	Design identifies basic requirement for an application and process a effective solution.	L2
EE703PC.2	Build knowledge through practical assignments and learn the various design methods for solving problems.	L2
EE703PC.3	Develop skill to build design techniques for various problem analyses.	L2
EE703PC.4	Summarize the fundamental concepts and techniques used in mini project.	L2

B.TECH IV YEAR I SEM EEE (R18)

Course Name: PROJECT STAGE-I

Course Code: EE704PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE704PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
EE704PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
EE704PC.3	Develop a final product/process, perform testing, arrive at results & conclusions and suggest future directions.	L2
EE704PC.4	Make up project enables the student to understand the business process	L2



*Grace-1-*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

### Fourth Year Second Semester

**B.TECH IV YEAR II SEM EEE (R18)**

**Course Name:** AI TECHNIQUES IN ELECTRICAL ENGINEERING      **Course Code:** EE813PE

(PE – V)

Course Outcome No	Course Outcome Statement	B.T Level
EE813PE.1	Understand feed forward neural networks, feedback neural networks and learning techniques.	L2
EE813PE.2	Understand fuzziness involved in various systems and fuzzy set theory.	L2
EE813PE.3	Develop fuzzy logic control for applications in electrical engineering	L3
EE813PE.4	Develop genetic algorithm for applications in electrical engineering.	L3


**B.TECH IV YEAR II SEM EEE (R18)**

**Course Name:** SMART GRID TECHNOLOGIES (PE – VI)      **Course Code:** EE821PE

Course Outcome No	Course Outcome Statement	B.T Level
EE821PE.1	Understand the features of small grid in the context of Indian grid.	L2
EE821PE.2	Understand the role of automation in transmission and distribution.	L2
EE821PE.3	Apply evolutionary algorithms for smart grid.	L3
EE821PE.4	Understand operation and maintenance of PMUs, PDCs, WAMs, and voltage and frequency control in micro grid	L2



  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
	<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Pc.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec36.ac.in E-mail: mtec.66@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9889089556.	

**B.TECH IV YEAR II SEM EEE (R18)**

**Course Name: ADVANCED CONTROL OF ELECTRIC DRIVES (PE – VI) Course Code: EE823PE**

Course Outcome No	Course Outcome Statement	B.T Level
EE823PE.1	Understand the operation of power electronic converters and their control strategies.	L2
EE823PE.2	Understand the vector control strategies for ac motor drives	L2

**B.TECH IV YEAR II SEM EEE (R18)**

**Course Name: PROJECT STAGE-II**

**Course Code: EE801PC**

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE801PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
EE801PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
EE801PC.3	Develop a final product/process, perform testing ,arrive at results &conclusions and suggest future directions.	L2
EE801PC.4	Make a paper for conference presentation/publication, if possible.	L2
EE801PC.5	Make up project enables the student to understand the business process	L2



  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174,**



**DEPARTMENT OF MECHANICAL ENGINEERING****Regulation –R18****FIRST YEAR FIRST SEMESTER**

B.TECH | YEAR | SEM ME

Name of the Course: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vMEtors	L3
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L2
MA101BS.4	Solve the applications on the mean value theorems.	L3
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L2
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L2
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L3



*Yessica I-*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Viii), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959558.

### B.TECH I YEAR I SEM ME

Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE103ES.1	Understand and analyze basic Electrical circuits	L2
EE103ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE103ES.3	Introduce components of Low Voltage Electrical Installations..	L2

### B.TECH I YEAR I SEM ME

Name of the Course: Engineering Workshop

Course Code: ME105ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME105ES.1	Study and practice on machine tools and their operations	L2
ME105ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME105ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME105ES.4	Apply basic electrical engineering knowledge for house wiring practice.	L3



*Y. Srinivas*  
**PRINCIPAL,**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdt. &amp; Dist.) - 505174, Telangana State.

Website : www.mtac86.ac.in E-mail: mtac.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

**B.TECH I YEAR I SEM ME**

Course Name: ENGLISH

Course Code: EN105HS

Course Outcome No	Course Outcome Statement	B.T Level
EN105HS.1	Use English Language effectively in spoken and written forms	L3
EN105HS.2	Comprehend the given texts and respond appropriately.	L2
EN105HS.3	Communicate confidently in various contexts and different cultures.	L2
EN105HS.4	Acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.	L2

**B.TECH I YEAR I SEM ME**

 Name of the Course: **ENGINEERING CHEMISTRY LABORATORY**

Course Code : CH106BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH106BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH106BS.2	Able to perform methods such as conductometry, potentiometric and pH meter in order to find out the concentrations or equivalence points of acids and bases	L2
CH106BS.3	Students are able to prepare polymers like bakelite and nylon-6.	L2
CH106BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3





Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkurru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9949472523, +91 9542709545, +91 9989959556.

B.TECH | YEAR | SEM ME

Name of the Course: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN107HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN107HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN107HS.2	Neutralize their accent for intelligibility	L2
EN107HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3

B.TECH | YEAR | SEM ME

Name of the Course: **BASIC ELECTRIC ENGINEERING**

Course Code: EE108ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE108ES.1	Understand and analyze basic ELECTRIC circuits	L2
EE108ES.2	Study the working principles of ELECTRIC Machines and Transformers	L1
EE108ES.3	Introduce components of Low Voltage ELECTRIC Installations..	L2



*Y. Srinivas*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9049472523, +91 9542709545, +91 9989959356.

### FIRST YEAR SECOND SEMESTER

B.TECH I YEAR II SEM ME

Course Name: MATHEMATICS - II

Course Code: MA201BS

Course Outcome No	Course Outcome Statement	B.T Level
MA201BS.1	Identify whether the given differential equation of first order is exact or not	L2
MA201BS.2	Solve higher differential equation and apply the concept of differential equation to real world problems	L3
MA201BS.3	Evaluate the multiple integrals and apply the concept to find areas, volumes, centre of mass and Gravity for cubes, sphere and rectangular parallelepiped	L4
MA201BS.4	Evaluate the line, surface and volume integrals and converting them from one to another	L5

B.TECH I YEAR II SEM ME

Course Name: APPLIED PHYSICS

Course Code: AP202BS

Course Outcome No	Course Outcome Statement	B.T Level
AP202BS.1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	L2
AP202BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	L3
AP202BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	L3
AP202BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdt. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9048472523, +91 9542709545, +91 9989999556.

### B.TECH I YEAR II SEM ME

Course Name: PROGRAMMING FOR PROBLEM SOLVING

Course Code: AP205BS

Course Outcome No	Course Outcome Statement	B.T Level
AP205BS.1	To write algorithms and to draw flowcharts for solving problems.	L3
AP205BS.2	To convert the algorithms/flowcharts to C programs	L4
AP205BS.3	To code and test a given logic in C programming language.	L5
AP205BS.4	To use arrays, pointers, strings and structures to write C programs	L2
AP205BS.5	Searching and sorting problems.	L3

### B.TECH I YEAR II SEM ME

Course Name: ENGINEERING GRAPHICS

Course Code: ME204ES

Course Outcome No	Course Outcome Statement	B.T Level
ME204ES.1	Preparing working drawings to communicate the ideas and information.	L2
ME204ES.2	Read, understand and interpret engineering drawings.	L2



*Green*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9869959556.

B.TECH I YEAR II SEM ME

Name of the Course: **APPLIED PHYSICS LABORATORY**

Course Code: AP205BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP205BS.1	Know the determination of the Planck's constant using Photoelectric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
AP205BS.2	Appropriate quantum physics in semiconductor devices and optoelectronics.	L2
AP205BS.3	Gain the knowledge of applications of dielectric constant	L2
AP205BS.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
AP205BS.5	Carried out data analysis	L2



*Green*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdi. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989950556.

**B.TECH I YEAR II SEM ME**
**Course Name: PROGRAMMING FOR PROBLEM SOLVING LAB Course Code: CS106E**

Course Outcome No	Course Outcome Statement	B.T Level
CS106E.1	formulate the algorithms for simple problems	L3
CS106E.2	translate given algorithms to a working and corrMEt program	L3
CS106E.3	corrMEt syntax errors as reported by the compiler	L2
CS106E.4	identify and corrMEt logical errors encountered during exMEution	L4
CS106E.5	represent and manipulate data with arrays, strings and structure	L3

**B.TECH I YEAR II SEM ME**
**Course Name: ENVIRONMENTAL SCIENCE Course Code: MC109ES**

Course Outcome No	Course Outcome Statement	B.T Level
MC109ES.1	Based on this course, the Engineering graduate will understand /evaluate / develop tMEhnologies on the basis of MEological principles and environmental regulations which in turn helps in sustainable development	L2





## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec88.ac.in E-mail: mtec.88@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9899959556.

### SECOND YEAR FIRST SEMESTER

B.TECH II YEAR I SEM ME

Name of the Course: Probability and Statistics & Complex Variables Course Code: MA301BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA301BS.1	Formulate and solve problems involving random variables and apply statistical methods for analysing experimental data.	L2
MA301BS.2	Analyse the complex function with reference to their analyticity, integration using Cauchy's integral and residue theorems	L4
MA301BS.3	Taylor's series expansions of complex function	L2
MA301BS.4	Laurent's series expansions of complex function	L2

B.TECH II YEAR I SEM ME

Name of the Course: MEanics of Solids

Course Code: ME302PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA302BS.1	Analyze the behavior of the solid bodies subjected to various types of loading	L2
MA302BS.2	Apply knowledge of materials and structural elements to the analysis of simple structures	L4
MA302BS.3	Undertake problem identification, formulation and solution using a range of analytical methods.	L2
MA302BS.4	ExpMEtation and capacity to undertake lifelong learning	L2







## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9999959556.

### B.TECH II YEAR I SEM ME

Name of the Course: Material Science and Metallurgy

Course Code: ME303PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME303PC.1	Apply knowledge of materials and structural elements to the analysis of simple structures	L2
ME303PC.2	Analyze the behavior of the solid bodies	L4
ME303PC.3	ExpMEtation and capacity to undertake lifelong learning	L2
ME303PC.4	Understand the idea for selMEting materials	L2

### B.TECH II YEAR I SEM ME

Name of the Course: Production TMEhnology

Course Code: ME304PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME303PC.1	Understand the idea for selMEting materials for patterns	L2
ME303PC.2	Design core, core print and gating system in metal casting processes	L4
ME303PC.3	Develop process-maps for metal forming processes using plasticity principles	L2
ME303PC.4	Understand the arc, gas, solid state and resistance welding processes	L2



*Y. Suresh*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9842709545, +91 9889999556.

B.TECH II YEAR I SEM ME

Name of the Course: Thermodynamics

Course Code: ME305PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME305PC.1	Apply the laws of Thermodynamics	L2
ME305PC.2	the student should be able to KNOW THE PROPERTIES OF SYSTEM	L4
ME305PC.3	TO know the basics	L2
ME305PC.4	To know the cycle	L2

B.TECH II YEAR I SEM ME

Name of the Course: Production Technology Lab

Course Code: ME306PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME306PC.1	Understanding the properties of moulding sands	L2
ME306PC.2	Fabricate joints using gas welding and arc welding	L4
ME306PC.3	Understanding the method of pattern making	L2
ME306PC.4	Basic idea of press working tools and performs moulding studies on plastics.	L2



*Y. Praveen Kumar*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542799545, +91 9089959356.

### B.TECH II YEAR I SEM ME

Name of the Course: Machine Drawing Practice

Course Code: ME307PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME307PC.1	Preparation of engineering and working drawings with dimensions and bill of material during design and development. Developing assembly drawings using part drawings of machine components	L2
ME307PC.2	Conventional representation of materials, common machine elements and parts such as screws, nuts, bolts, keys, gears, webs, ribs	L4
ME307PC .3	Methods of dimensioning, general rules for sizes and placement of dimensions for holes, centers, curved and tapered features	L2
ME307PC..4	Title boxes, their size, location and details - common abbreviations and their liberal usage	L2

### B.TECH II YEAR I SEM ME

Name of the Course: Material Science and MEanics of Solids Lab

Course Code: ME308PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME308PC.1	Analyze the behavior of the solid bodies subjected to various types of loading	L2
ME308PC.2	Apply knowledge of materials and structural elements to the analysis of simple structures	L4
ME308PC.3	Undertake problem identification, formulation and solution using a range of analytical methods	L2
ME308PC.4	ExpMEtation and capacity to undertake lifelong learning	L2






**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdi. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

**B.TECH II YEAR I SEM ME**

Name of the Course: Constitution of India

Course Code \*MC309

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC309.1	The Constitution of India is not only a legal document but it also reflects social, political and economic perspectives of the Indian Society.	L2
*MC309.2	The judicial activism of the Supreme Court of India and its historic contributions has been recognized throughout the world	L4
*MC309.3	Salient features and characteristics of the Constitution of India	L2
*MC309.4	. Emergency Provisions: National Emergency, President Rule, Financial Emergency	L2

**SECOND YEAR SECOND SEMESTER**
**B.TECH II YEAR II SEM ME**

Name of the Course: Basic Electrical and Electronics Engineering

Course Code EE401ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE401ES.1	To analyze and solve electrical circuits using network laws and theorems	L2
EE401ES.2	To introduce components of Low Voltage Electrical Installations	L4
EE401ES.3	To understand and analyze basic electrical and magnetic circuits	L2
EE401ES.4	To identify and characterize diodes and various types of transistors	L2





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9999959506.

### B.TECH II YEAR II SEM ME

Name of the Course: Kinematics of Machinery Course

Code ME402PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME402PC.1	The main purpose is to give an idea about the relative motions obtained in all the above type of components used in MEanical Engineering	L2
ME402PC.2	To know the Straight-line motion MEanisms:	L4
ME402PC.3	Analysis of motion of followers	L2
ME402PC.4	To know about the Gear Trains	L2

### B.TECH II YEAR II SEM ME

Name of the Course: Thermal Engineering - I

Course Code ME403PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME403PC.1	At the end of the course, the student should be able to evaluate the performance of IC engines under the given operating conditions	L2
ME403PC.2	At the end of the course, the student should be able to evaluate the performance of compressor under the given operating conditions	L4
ME403PC.3	Apply the laws of Thermodynamics to evaluate the performance of Refrigeration and air-conditioning cycles	L2
ME403PC.4	Understand the functionality of the major components of the IC Engines and effMEts of operating conditions on their performance	L2





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail mtec.86@gmail.com Contact : +91 9848472523, +91 9542705545, +91 9889955556.

### B.TECH II YEAR II SEM ME

Name of the Course: Fluid MEanics and Hydraulic Machines

Course Code ME404PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME404PC.1	Able to identify type of fluid flow patterns and describe continuity equation.	L2
ME404PC.2	To selMEt and analyze an appropriate turbine with reference to given situation in power plants	L4
ME404PC.3	To estimate performance parameters of a given Centrifugal and RMEiprocating pump.	L2
ME404PC.4	Able to demonstrate boundary layer concepts	L2

### B.TECH II YEAR II SEM ME

Name of the Course: Instrumentation and Control Systems

Course Code ME405PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME405PC.1	To identify various elements and their purpose in typical instruments, to identify various errors that would occur in instruments	L2
ME405PC.2	Analysis of errors so as to determine corrMEtion factors for each instrument	L4
ME405PC.3	To understand static and dynamic characteristics of instrument and should be able to determine loading response time.	L2
ME405PC.4	For given range of displacement should be able to spMEify transducer, it accurate and loading time of that transducer	L2



*Yessss*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9846472523, +91 9542709545, +91 9999959666.

B.TECH II YEAR II SEM ME

Name of the Course: Basic EIMETrical and EIMEtronic Engineering Lab

Course Code EE409ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE409ES.1	To analyze and solve eIMETrical circuits using network laws and theorems	L2
EE409ES.2	To study the working principles of EIMETrical Machines	L4
EE409ES.3	To introduce components of Low Voltage EIMETrical Installations	L2
EE409ES.4	To identify and characterize diodes and various types of transistors	L2

B.TECH II YEAR II SEM ME

Name of the Course: Fluid MEAnics and Hydraulic Machines Lab

Course Code : ME407PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME407PC.1	Able to explain the effMEt of fluid properties on a flow system	L2
ME407PC.2	Able to identify type of fluid flow patterns and describe continuity equation	L4
ME407PC.3	To analyze a variety of practical fluid flow and measuring devices and utilize fluid MEAnics principles in design	L2
ME407PC.4	To selMEt and analyze an appropriate turbine with reference to given situation in power plants	L2



*Y. Sreenivasulu Reddy*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989955556.

B.TECH II YEAR II SEM ME

Name of the Course: Instrumentation and Control Systems Lab

Course Code ME408PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME408PC.1	the student will be able to Characterize and calibrate measuring devices	L2
ME408PC.2	Identify and analyze errors in measurement.	L4
ME408PC.3	Analyze measured data using regression analysis	L2
ME408PC.4	Calibration of Pressure Gauges, temperature, LVDT, capacitive transducer, rotameter.	L2

B.TECH II YEAR II SEM ME

Name of the Course: Gender Sensitization Lab

Course Code \*MC409

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC409.1	To develop students' sensibility with regard to issues of gender in contemporary India	L2
*MC409.2	To introduce students to information about some key biological aspMEts of genders	L4
*MC409.3	To help students refIMEt critically on gender violence.	L2
*MC409.4	To expose students to more egalitarian interactions between men and women.	L2



*Freee / -*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Viii), PEDDAPALLI (Mdi. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989955596.

**THIRD YEAR FIRST SEMESTRE**

B.TECH III YEAR I SEM ME

Name of the Course Dynamics of Machinery

Course Code ME501PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME501PC.1	To know about governors	L2
ME501PC.2	To understand the general design procedures	L4
ME501PC.3	in all the above type of components used in MEanical Engineering	L2
ME501PC.4	T understand the balancing of masses	L2

B.TECH III YEAR I SEM ME

Name of the Course Design of Machine Members-I

Course Code ME502PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME502PC.1	To understand the general design procedures and principles in the design of machine elements	L2
ME502PC.2	To study different materials of construction and their properties and factors determining the selfMEtion of material for various applications.	L4
ME502PC.3	To determine stresses under different loading conditions.	L2
ME502PC.4	To learn the design procedure of different fasteners, joints, shafts and couplings.	L2






**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9848472523, +91 9542709545, +91 9399959556.

**B.TECH III YEAR I SEM ME**

Name of the Course Metrology &amp; Machine Tools

Course Code ME503PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME503PC.1	Identify techniques to minimize the errors in measurement.	L2
ME503PC.2	Identify methods and devices for measurement of length, angle, gear & thread parameters, surface roughness and geometric features of parts	L4
ME503PC.3	Understand working of lathe, shaper, planer, drilling, milling and grinding machines	L2
ME503PC.4	Comprehend speed and feed mechanisms of machine tools.	L2

**B.TECH III YEAR I SEM ME**

Name of the Course Business Economics &amp; Financial Analysis

Course Code ME504PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME504PC.1	the various Forms of Business and the impact of Economic variables on the Business.	L2
ME504PC.2	The Demand, Supply, Production, Cost, Market Structure, Pricing aspects are learnt	L4
ME504PC.3	The Students can study the firm's financial position	L2
ME504PC.4	By analysing the Financial Statements of a Company	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542705545, +91 9989959556.

**B.TECH III YEAR I SEM ME**

Name of the Course Thermal Engineering-II

Course Code ME505PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME505PC.1	Develop state – space diagrams based on the schematic diagrams of process flow of steam and gas turbine plants	L2
ME505PC.2	Apply the laws of Thermodynamics to analyze thermodynamic cycles	L4
ME505PC.3	Differentiate between vapour power cycles and gas power cycles	L2
ME505PC.4	Infer from property charts and tables and to apply the data for the evaluation of performance parameters of the steam and gas turbine plants	L2

**B.TECH III YEAR I SEM ME**

Name of the Course Operations Research

Course Code ME506PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME506PC.1	Infer from property charts and tables	L2
ME506PC.2	Formulation of optimization model	L4
ME506PC.3	Formulation of applying appropriate optimization technique	L2
ME506PC.4	To apply the data for the evaluation of performance parameters of the steam and gas turbine plants	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9809959558.

**B.TECH III YEAR I SEM ME**

Name of the Course Thermal Engineering Lab

Course Code ME507PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME507PC.1	To understand the working principles of IC Engines,	L2
ME507PC.2	Study of Boilers	L4
ME507PC.3	To understand the working principles of IC Engines Compressors	L2
ME507PC.4	Dis-assembly / Assembly of IC Engines	L2

**B.TECH III YEAR I SEM ME**

Name of the Course Metrology &amp; Machine Tools Lab

Course Code ME508PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME508PC.1	To impart practical exposure to the metrology equipment	L2
ME508PC.2	To conduct experiments	L4
ME508PC.3	understand the working of the experiments	L2
ME508PC.4	To impart practical exposure to the Machine tools	L2



**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989950556.

**B.TECH III YEAR I SEM ME**

Name of the Course Kinematics &amp; Dynamics Lab

Course Code ME509PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME509PC.1	Understand types of motion	L2
ME509PC.2	Analyze forces and torques of components in linkages	L4
ME509PC.3	Understand static and dynamic balance	L2
ME509PC.4	Understand forward and inverse kinematics of open-loop MEanisms	L2

**B.TECH III YEAR I SEM ME**

Name of the Course : IntellMEtual Property Rights

Course Code \*MC510

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC510.1	Understand the Trade SMERets	L2
*MC510.2	Understand Law of copy rights	L4
*MC510.3	Understand New development of intellMEtual property	L2
*MC510.4	Understand Trade Marks	L2



**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

**THIRD YEAR SECOND SEMESTER**

B.TECH III YEAR II SEM ME

Name of the Course Design of Machine Members-II

Course Code ME601PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME601PC.1	Knowledge about journal bearing design using different empirical relations	L2
ME601PC.2	Estimation of life of rolling element bearings and their selection for given service conditions	L4
ME601PC.3	Acquaintance with design of the components as per the standard, recommended procedures which is essential in development of machinery in industry	L2
ME601PC.4	Acquaintance with design of the components as per the standard, recommended procedures which is essential in design	L2

B.TECH III YEAR II SEM ME

Name of the Course Heat Transfer

Course Code ME602PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME602PC.1	Understand the basic modes of heat transfer	L2
ME602PC.2	Understand and analyze heat transfer through extended surfaces	L4
ME602PC.3	Understand concepts of continuity, momentum and energy equations	L2
ME602PC.4	Understand the principles of boiling, condensation and radiation heat transfer	L2





## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9949472523, +91 9542709545, +91 9989959556.

### B.TECH III YEAR II SEM ME

Name of the Course CAD & CAM

Course Code ME603PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME603PC.1	Understand geometric transformation tMEhniques in CAD	L2
ME603PC.2	Develop mathematical models to represent curves and surfaces.	L4
ME603PC.3	Model engineering components using solid modeling tMEhniques.	L2
ME603PC.4	Develop programs for CNC to manufacture industrial components	L2

### B.TECH III YEAR II SEM ME

Name of the Course PRODUCTION PLANNING AND CONTROL

Course Code : ME604PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME604PC.1	Evaluate MRP and JIT systems against traditional inventory control systems	L2
ME604PC.2	Understand basics of variability and its role in the performance of a production system	L4
ME604PC.3	Analyze aggregate planning strategies.	L2
ME604PC.4	Apply forMEasting and scheduling tMEhniques to production systems.	L2



*Freeze*  
 PRINCIPAL  
 MOTHER THERESA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989910658.

### B.TECH III YEAR II SEM ME

Name of the Course Non-Conventional Energy Sources

Course Code : ME8000E

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME8000E.1	Understand the principles of wind power and solar photovoltaic power generation, fuel cells	L2
ME8000E.2	Design suitable power controller for wind and solar applications	L4
ME8000E.3	Assess the cost of generation for conventional and renewable energy plants	L2
ME8000E.4	Analyze the issues involved in the integration of renewable energy sources to the grid	L2

### B.TECH III YEAR II SEM ME

Name of the Course : Finite Element Methods

Course Code: ME604PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME604PC.1	Apply finite element method to solve problems in solid MEanics, fluid MEanics and heat transfer	L2
ME604PC.2	Formulate and solve problems in one dimensional structures including trusses, beams and frames	L4
ME604PC.3	Formulate and solve problems in one dimensional structures including trusses, beams and frames	L2
ME604PC.4	ANSYS, ABAQUS, NASTRAN	L2





## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9846472523, +91 9542700545, +91 9089959566.

### B.TECH III YEAR II SEM ME

Name of the Course: Heat Transfer Lab

Course Code ME605PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME605PC.1	Perform transient heat conduction experiment	L2
ME605PC.2	Obtain variation of temperature along the length of the pin fin under forced and free convection	L4
ME605PC.3	Perform radiation experiments: Determine surface emissivity of a test plate and Stefan-Boltzmann's constant and compare with theoretical value	L2
ME605PC.4	Perform steady state conduction experiments to estimate thermal conductivity of different materials	L2

### B.TECH III YEAR II SEM ME

Name of the Course CAD & CAM Lab

Course Code ME606PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME606PC.1	To understand the analysis of various aspMEts in of manufacturing design	L2
ME606PC.2	Estimation of natural frequencies and mode shapes, Harmonic response of 2D beam.	L4
ME606PC.3	Study of various standard Translators. Design of simple components.	L2
ME606PC.4	Representation of dimensioning and tolerances.	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E., New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Villi), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail mtec.86@gmail.com Contact : +91 9848472523, +91 9542709545, +91 9989950556.

B.TECH III YEAR II SEM ME

Name of the Course Advanced Communication Skills lab

Course Code: EN608PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN608HS.1	Acquire vocabulary and use it to communicate to others.	L2
EN608HS.2	Understand and enhance their proficiency in Reading.	L2
EN608HS.3	Apply relevant formats of writing paragraph, e-mail and letter writing ,resume and report writing.	L2
EN608HS.4	Plan their ideas to give oral presentations like seminars, ppt.	L2

B.TECH III YEAR II SEM ME

Name of the Course Environmental Science

Course Code : \*MC609

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC609.1	Based on this course, the Engineering graduate will understand /evaluate / develop tMEhnologies	L2
*MC609.2	environmental regulations which in turn helps in sustainable development	L4
*MC609.3	Natural Resources: Classification of Resources	L2
*MC609.4	Environmental Policy, Legislation & EIA	L2



*Y. Suresh*  
 PRINCIPAL  
 MOTHER THERESA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



# MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Med. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9948472523, +91 9542709543, +91 9909950598.

## Fourth year First Semester

B.TECH IV YEAR I SEM ME

Name of the Course Refrigeration &amp; Air Conditioning

Course Code ME701PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME701P.1	At the end of the course, the student should be able to Differentiate between different types of refrigeration systems	L2
ME701P.2	Thermodynamically analyse refrigeration and air conditioning systems	L4
ME701P.3	Apply the principles of Psychometrics to design the air conditioning loads for the industrial applications.	L2
ME701P.4	evaluate performance parameters of psychrometric properties	L2

B.TECH IV YEAR I SEM ME

Name of the Course Automation in Manufacturing

Course Code ME712PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME712PE.1	Understanding the importance of MEological balance for sustainable development	L2
ME712PE.2	Understanding the impacts of developmental activities and mitigation measures	L4
ME712PE.3	Understanding the environmental policies and regulations	L2
ME712PE.4	Understanding Automated material handling	L2



*Freeze / -*  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9846472523, +91 9542709545, +91 9989950556

### B.TECH IV YEAR I SEM ME

Name of the Course Power Plant Engineering

Course Code ME721PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME721PE.1	Understand working of boilers including water tube, fire tube and high pressure boilers and determine efficiencies	L2
ME721PE.2	Evaluate the performance of condensers and steam turbines	L4
ME721PE.3	Evaluate the performance of gas turbines	L2
ME721PE.4	Understand the concept of Rankine cycle	L2

### B.TECH IV YEAR I SEM ME

Name of the Course : Fluid Power Systems

Course Code ME733PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME733PE.1	Understand the Properties of fluids, Fluids for hydraulic systems,	L2
ME733PE.2	governing laws. distribution of fluid power, Design and analysis of typical hydraulic circuits.	L4
ME733PE.3	maintenance of system.	L2
ME733PE.4	• Know accessories used in fluid power system, Filtration systems	L2



*Yessss*  
**PRINCIPAL,**  
**MOTHER THERESA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9089950556.

### B.TECH IV YEAR I SEM ME

Name of the Course Principles of Entrepreneurship

Course Code : ME6000E

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME6000E.1	Idea of Production and marketing management;	L2
ME6000E.2	To know the Industrial Financial Support;	L4
ME6000E.3	Understanding the Labour legislation, salient provision of health	L2
ME6000E.4	To know the Financing and Managing the new ventures	L2

### B.TECH IV YEAR I SEM ME

Name of the Course Industrial Oriented Mini ProjME/ Summer Internship

Course Code ME702PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME702PC.1	Summarize the fundamental concepts and techniques used in mini projME.	L2
ME702PC.2	Develop skill to build design techniques for various problem analyses.	L4
ME702PC.3	Build knowledge through practical assignments and learn the various design methods for solving problems	L2
ME702PC.4	Design identifies basic requirement for an application and process a effective solution	L2






**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 8849472523, +91 8542709545, +91 9889959556.

**B.TECH IV YEAR I SEM ME**

Name of the Course Seminar

Course Code ME703PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME703PC.1	Summarize the fundamental concepts and techniques used in mini project.	L2
ME703PC.2	Develop skill to build design techniques for various problem analyses.	L4
ME703PC.3	Build knowledge through practical assignments and learn the various design methods for solving problems	L2
ME703PC.4	Design identifies basic requirement for an application and process a effective solution	L2

**FOURTH YEAR SECOND SEMESTER**
**B.TECH IV YEAR II SEM ME**

Name of the Course Industrial Robotics

Course Code : ME811PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME811PE.1	Make the students acquainted with the theoretical aspects of Robotics	L2
ME811PE.2	Make the students to understand the importance of robots in various fields of engineering.	L4
ME811PE.3	Expose the students to various robots and their operational details	L2
ME811PE.4	Enable the students to acquire practical experience in the field of Robotics through design projects and case studies.	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdi. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9889959556.

**B.TECH IV YEAR II SEM ME**

Name of the Course: Industrial Management

Course Code ME821PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME821PE.1	• Able to apply tMEhniques for plant location, design plant layout and value analysis	L2
ME821PE.2	Able to apply various quality control tMEhniques and sampling plans	L4
ME821PE.3	Able to do job evaluation and network analysis.	L2
ME821PE.4	Able to design the organization structure	L2

**B.TECH IV YEAR II SEM ME**

Name of the Course 1. Fundamentals of Robotics Course Code

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP102BS.1	Make the students to understand the importance of robots in various fields of engineering	L2
AP102BS.2	Make the students acquainted with the theoretical aspMEts of Robotics	L4
AP102BS.3	Enable the students to acquire practical experience in the field of Robotics through design projMEts	L2
AP102BS.4	Expose the students to various robots and their operational details	L2





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtac.86@gmail.com Contact : +91 9849472523, +91 9842700545, +91 9889959058.

### B.TECH IV YEAR II SEM ME

Name of the Course: Project Stage - II Course Code : ME801PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME801PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
ME801PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
ME801PC.3	Develop a final product/process, perform testing ,arrive at results &conclusions and suggest future dirMEtions	L2
ME801PC.4	Make a paper for conference presentation/publication, if possible.	L2
ME801PC.5	Make up projMEt enables the student to understand the business process	L2



*Y. Sreenivas*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





## DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

### Regulation: R18

### First Year First Semester

B.TECH | YEAR I SEMECE (R18)

A.Y: 2021-2022

Name of the Course: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vectors	L3
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L2
MA101BS.4	Solve the applications on the mean value theorems.	L3
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L2
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L2
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L3



**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH I YEAR I SEMECE (R18)

A.Y: 2021-2022

Name of the Course: Applied Physics

Course Code: AP102BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP102BS.1	The student would be able to learn the fundamental concepts on Quantum behavior of matter in its micro state.	L2
AP102BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fiber optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	L4
AP102BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	L2
AP102BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials.	L2

B.TECH I YEAR I SEMECE (R18)

A.Y: 2021-2022

Name of the Course: PROGRAMMING FOR PROBLEM SOLVING

Course Code: CS103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS103ES.1	Draw flowcharts for solving arithmetic and logical problems	L2
CS103ES.2	Develop modular reusable code by understanding concepts of functions.	L2
CS103ES.3	Formulate algorithms and programs using arrays, pointers, strings and structures.	L3
CS103ES.4	Write a programs using Searching and sorting algorithms	L4



*Yeeeee-1-*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542706545, +91 9889959558

B.TECH | YEAR | SEMECE (R18)

A.Y: 2021-2022

Name of the Course: ENGINEERING GRAPHICS

Course Code: ME104ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME104ES.1	Preparing working drawings to communicate the ideas and information.	L2
ME104ES.2	Read, understand and interpret engineering drawings.	L2

B.TECH | YEAR | SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **APPLIED PHYSICS LABORATORY**

Course Code: EC206ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC206ES.1	Know the determination of the Planck's constant using Photo electric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
EC206ES.2	Appreciate quantum physics in semiconductor devices and optoelectronics.	L2
EC206ES.3	Gain the knowledge of applications of dielectric constant	L2
EC206ES.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
EC206ES.5	Carried out data analysis	L2



*Yrscv*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





B.TECH I YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: PROGRAMMING FOR PROBLEM SOLVING LAB Course Code: CS106ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS106ES.1	Write algorithms and to draw flowcharts for solving problems and translate the Algorithms/flowcharts to programs (in C language).	L4
CS106ES.2	Use functions to develop modular reusable code.	L2
CS106ES.3	Use arrays, pointers, strings and structures to formulate algorithms and programs.	L2
CS106ES.4	Understand Searching and sorting algorithms.	L2
CS106ES.5	modularize the code with functions so that they can be reused	L2
CS106ES.6	correct syntax errors as reported by the compilers	L2
CS106ES.7	identify and correct logical errors encountered during execution	L2

B.TECH I YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ENVIRONMENTAL SCIENCE

Course Code: \*MC110

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC110.1	Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development	L2



*Y. Sreenivasulu Reddy*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**FIRST YEAR SECOND SEMSTER**

B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: MATHEMATICS - II

Course Code: MA201BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA201BS.1	Identify whether the given differential equation of first order is exact or not.	L2
MA201BS.2	Solve higher differential equation and apply the concept of differential equation to real world problems.	L3
MA201BS.3	Use the Laplace transforms techniques for solving ODE's.	L1
MA201BS.4	Evaluate the line, surface and volume integrals and converting them from one to another	L2

B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **CHEMISTRY**

Course Code: CH202BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH202BS.1	Students will acquire the basic knowledge of electrochemical procedures related to corrosion and its control.	L2
CH202BS.2	The students are able to understand the basic properties of water and its usage in domestic and industrial purposes.	L2
CH202BS.3	They can learn the fundamentals and general properties of polymers and other engineering materials.	L2
CH202BS.4	They can predict potential applications of chemistry and practical utility in order to become good engineers and entrepreneurs.	L1



*Free*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE203ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE203ES.1	Understand and analyze basic Electrical circuits	L2
EE203ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE203ES.3	Introduce components of Low Voltage Electrical Installations..	L2

B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: Engineering Workshop

Course Code: ME205ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME205ES.1	Study and practice on machine tools and their operations	L2
ME205ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME205ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME205ES.4	Apply basic electrical engineering knowledge for house wiring practice.	L3

B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **ENGLISH**

Course Code: EN205HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN205HS.1	Understand the importance of vocabulary and sentence structures.	L2
EN205HS.2	Choose appropriate vocabulary and sentence structures for their oral and written communication	L2
EN205HS.3	Demonstrate their understanding of the rules of functional grammar.	L2
EN205HS.4	Develop comprehension skills from the known and unknown passages.	L3
EN205HS.5	Acquire basic proficiency in reading and writing modules of English	L2



*Year 1 -*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**





B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **ENGINEERING CHEMISTRY LABORATORY** Course Code CH207BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH207BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH207BS.2	Able to perform methods such as conductometry, potentiometric and pH merry in order to find out the concentrations or equivalence points of acids and bases	L2
CH207BS.3	Students are able to prepare polymers like bakelite and nylon-6.	L2
CH207BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3

B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **BASIC ELECTRICAL ENGINEERING LABORATORY** Course Code: EE208ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE208ES.1	Verify the basic Electrical circuits through different experiments.	L2
EE208ES.2	Evaluate the performance calculations of Electrical Machines and Transformers through Various testing methods.	L1
EE208ES.3	Analyze the transient responses of R, L and C circuits for different input conditions.	L2



*Y. Sreehar*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH I YEAR II SEMECE (R18)

A.Y: 2021-2022

Name of the Course: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN207HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN207HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN207HS.2	Neutralize their accent for intelligibility	L2
EN207HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3

## Second Year First Semester

B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: **ELECTRONIC DEVICES AND CIRCUITS**

Course Code: EC301PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC301PC.1	Know the characteristics of various components.	L2
EC301PC.2	Understand the utilization of components	L2
EC301PC.3	Understand the biasing techniques	L2
EC301PC.4	Design and analyze small signal amplifier circuits	L3

B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: **NETWORK ANALYSIS AND TRANSMISSION LINES**


Course Code: EC301PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC301PC.1	Gain the knowledge on basic RLC circuit's behavior.	L2
EC301PC.2	Analyze the Steady state and transient analysis of RLC Circuits	L2
EC301PC.3	Know the characteristics of two port network parameters.	L2
EC301PC.4	Analyze the transmission line parameters and configurations.	L3



Freeze  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC                      Estd : 1999                      JNTUH College Code : 86



**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**  
 (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)  
 P.P.Colony (Po.), Peddabonkuru (Vil), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.  
 Website : www.mtec86.ac.in    E-mail: mtec.86@gmail.com    Contact : +91 9649472523, +91 9542709548, +91 9989959556

B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: DIGITAL SYSTEM DESIGN

Course Code: EC301PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC301PC.1	Understand the numerical information in different forms and Boolean Algebra theorems	L2
EC301PC.2	Postulates of Boolean algebra and to minimize combinational functions	L2
EC301PC.3	Design and analyze combinational and sequential circuits	L2
EC301PC.4	Known about the logic families and realization of logic gates	L3

B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: SIGNALS AND SYSTEMS

Course Code: EC301PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC301PC.1	Differentiate various signal functions.	L2
EC301PC.2	Represent any arbitrary signal in time and frequency domain.	L2
EC301PC.3	Understand the characteristics of linear time invariant systems.	L2
EC301PC.4	Analyze the signals with different transform technique	L3

B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: PROBABILITY THEORY AND STOCHASTIC PROCESSES

Course Code: EC305ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC305ES.1	Understand the concepts of Random Process and its Characteristics.	L2
EC305ES.2	Understand the response of linear time Invariant system for a Random Processes.	L2
EC305ES.3	Determine the Spectral and temporal characteristics of Random Signal	L1
EC305E.4	Understand the concepts of Noise in Communication systems	L2



*Francis*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ELECTRONIC DEVICES AND CIRCUITS LAB

Course Code: EC306PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC306PC.1	Analyze the different types of diodes, operation and its characteristics.	L2
EC306PC.2	Understand the characteristics of BJT, FET.	L2
EC306PC.3	Understand the characteristics of FET amplifiers, small signal parameters.	L2
EC306PC.4	Describe voltage references of clippers, clampers.	L3
EC306PC.5	Apply various devices to real time problems.	L3

B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: Digital System Design Lab

Course Code: EC307PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC307PC.1	Design and realization logic gates using digital IC's.	L2
EC307PC.2	Design the combinational circuits such as 4-bit adder/subtractor, 4 bit comparator, MUX using ICs.	L2
EC307PC.3	Design and implement sequential circuits such as shift registers, counters using flip-flops.	L2
EC307PC.4	Design and realization of a 4-bit gray to binary and binary to gray converter.	L3
EC306PC.5	Design and realization of a sequence detector a FSM.	L3


B.TECH II YEAR I SEM ECE (R18)

A.Y: 2021-2022



*Francis*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC Estd : 1999 JNTUH College Code : 86



**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**  
 (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)  
 P.P.Colony (Po.), Paddabankuru (VIII), PEDDAPALLI (Mdt. & Dist.) - 505174, Telangana State.  
 Website : www.mtec05.ac.in E-mail : mtec.05@gmail.com Contact : +91 9849472523, +91 9842709545, +91 9889959558.

Name of the Course: **BASIC SIMULATION LAB**

Course Code: EC308PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC308PC.1	Design of various signal functions and its operations in MATLAB.	L2
EC308PC.2	Design any arbitrary signal in time and frequency domain.	L2
EC308PC.3	Able to determine the characteristics of linear time invariant systems with its realizations.	L2
EC308PC.4	Analyze the signals with different transform technique.	L3
EC308PC.4	Analyze the sampling process and correlation of various signals,	L3

## Second Year Second Semester

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: LAPLACE TRANSFORMS, NUMERICAL METHODS AND COMPLEX VARIABLES


Course Code: EC502PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC502PC.1	Use the Laplace transforms techniques for solving ODE's	L2
EC502PC.2	Find the root of a given equation.	L2
EC502PC.3	Estimate the value for the given data using interpolation	L1
EC502PC.4	Find the numerical solutions for a given ODE's.	L1
EC502PC.5	Analyze the complex function with reference to their analyticity, integration using Cauchy's integral and residue theorems	L2



*Y. Sreeraj*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC                      Estd : 1999                      JNTUH College Code : 86



**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**  
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*  
 P.P.Colony (Po.), Paddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.  
 Website : www.mtec86.ac.in    E-mail: mtec.86@gmail.com    Contact : +91 9849472523, +91 9543709545, +91 9889999556

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ELECTROMAGNETIC FIELDS AND WAVES

Course Code: EC402PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC402PC.1	Get the knowledge of Basic Laws, Concepts and proofs related to Electrostatic Fields and Magneto static Fields.	L2
EC402PC.2	Distinguish between the static and time-varying fields, establish the corresponding sets of Maxwell's Equations and Boundary Conditions.	L2
EC402PC.3	Analyze the Wave Equations for good conductors, good dielectrics and evaluate the UPW Characteristics for several practical media of interest.	L1
EC402PC.4	To analyze completely the rectangular waveguides, their mode characteristics, and design waveguides for solving practical problems.	L1

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ANALOG AND DIGITAL COMMUNICATIONS

Course Code: EC403PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC403PC.1	Analyze and design of various continuous wave and angle modulation and demodulation techniques	L2
EC403PC.2	Understand the effect of noise present in continuous wave and angle modulation techniques	L2
EC403PC.3	Attain the knowledge about AM , FM Transmitters and Receivers	L1
EC403PC.4	Analyze and design the various Pulse Modulation Techniques.	L1
EC403PC.5	Understand the concepts of Digital Modulation Techniques and Baseband transmission.	L2



*Handwritten signature*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: LINEAR IC APPLICATIONS

Course Code: EC404PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC404PC.1	A thorough understanding of operational amplifiers with linear integrated circuits.	L2
EC404PC.2	Attain the knowledge of functional diagrams and applications of IC 555 and IC 565	L2
EC404PC.3	Acquire the knowledge about the Data converters.	L1

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ELECTRONIC CIRCUIT ANALYSIS

Course Code: EC405PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC405PC .1	Design the multistage amplifiers and understand the concepts of High Frequency Analysis of Transistors.	L2
EC405PC .2	Utilize the Concepts of negative feedback to improve the stability of amplifiers and positive feedback to generate sustained oscillations	L2
EC405PC .3	Design and realize different classes of Power Amplifiers and tuned amplifiers useable for audio and Radio applications.	L1
EC405PC .4	Design Multivibrators and sweep circuits for various applications.	L1



*Y. Sreenivas*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>		
(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)		
P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Md. & Dist.) - 505174, Telangana State.		
Website : www.mtc86.ac.in E-mail: mtc86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9999299936		

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ELECTRONIC CIRCUIT ANALYSIS LAB Course Code: EC408PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC408PC .1	Design Amplifier circuits and simulation by using Multiuse and testing done in hardware .	L2
EC408PC .2	Design Oscillator circuits simulation by using Multisim, testing done in hardware.	L2
EC408PC .3	Analyze feedback topology for amplifiers simulation by using Multisim, testing done in hardware.	L1
EC408PC .4	Analyze class A and B power amplifiers simulation by using Multisim, testing done in hardware	L1

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: IC APPLICATIONS LAB

Course Code: EC407PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC407PC .1	Understand the functionalities of Inverting and Non-inverting Amplifiers, Adder , Subtractor ,Comparators using Op Amp.	L2
EC407PC .2	Design the integrated circuit, Schmitt Trigger Circuits using IC741.	L2
EC407PC .3	Understand and design IC741 waveform generators.	L1
EC407PC .4	Design multivibrators using IC555.	L1



*Yessu*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174**

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (M&L & Dist.) - 505174, Telangana State.

Website : www.mtc06.ac.in E-mail: mteco.06@gmail.com Contact : +91 9849473523, +91 9542709545, +91 9989958558.

B.TECH II YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ANALOG AND DIGITAL COMMUNICATION LAB

Course Code: EC406PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC406PC .1	Compare various modulation and demodulation techniques in Analog communications.	L2
EC406PC .2	Understand the operations of different types of detectors.	L2
EC406PC .3	Understand the operation of Multiplexing DE multiplexing techniques.	L1
EC406PC .4	Understand The Concepts Of PCM, DM, FSK, BPSK, DPSK, and QPSK.	L1

### Third Year First Semester

B.TECH III YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: CONTROL SYSTEMS

Course Code: EC503PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ECS03PC.1	Understand the modeling of linear-time-invariant systems using transfer function and state space representations.	L2
EC503PC.2	Understand the concept of stability and its assessment for linear-time invariant systems.	L2
EC503PC.3	Design simple feedback controllers.	L1


*Yesee*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

B.TECH III YEAR I SEM ECE (R18)

A.Y: 2021-2022





Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 88
	<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)	
P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State. Website : www.mtcet.ac.in E-mail: mtec.88@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9909909550.		

Name of the Course: BUSINESS ECONOMICS AND FINANCIAL ANALYSIS

Course Code: SM504MS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
SM504MS.1	The students will understand the various Forms of Business and the impact of economic variables on the Business. The Demand, Supply, Production, Cost, Market Structure, Pricing aspects are learnt. The Students can study the firm's financial position by analyzing the Financial Statements of a Company.	L3

B.TECH III YEAR I SEM ECE(R18)

A.Y: 2021-2022

Name of the Course: MICROPROCESSORS AND MICROCONTROLLERS

Course Code: EC501PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC501PC.1	Understands the internal architecture, organization and assembly language programming of 8086 processors	L2
EC501PC.2	Understands the internal architecture, organization and assembly language programming of 8051/controllers	L2
EC501PC.3	Understands the interfacing techniques to 8086 and 8051 based systems	L2
EC501PC.3	Understands the internal architecture of ARM processors and basic concepts of advanced ARM processors.	L2

Freeeeee /-  
 PRINCIPAL  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

B.TECH III YEAR I SEM ECE (R18)

A.Y: 2021-2022





Name of the Course: MICROPROCESSORS AND MICROCONTROLLERS LAB

Course Code: EC505PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC505PC.1	Design and implement programs on 8085 microprocessor.	L2
EC505PC.2	Design and implement programs on 8086 microprocessor.	L2
EC505PC.3	Design interfacing circuits with 8085.	L2
EC505PC.4	Design interfacing circuits with 8086.	L2

B.TECH III YEAR I SEM ECE (R18)

A.Y: 2021-2022


Name of the Course: DATA COMMUNICATIONS AND NETWORKS LAB

Course Code: EC506PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC505PC.1	Understand the basic idea of link between nodes and data transmission between nodes..	L2
EC505PC.2	Evaluate the performance of various LAN Topologies, RED QUEUE and Drop tail.	L2
EC505PC.3	Evaluate the performance of various TCP and UDP Protocols.	L2
EC505PC.4	valuate the performance of AODV and DSR, DSDV.	L2



*Free (-)*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI - 505 174.**

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9649472323, +91 9542709548, +91 9989959556.		

B.TECH III YEAR I SEM ECE(R18)

A.Y: 2021-2022

Name of the Course: **ADVANCED COMMUNICATION SKILLS LAB**

Course Code: EN508HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN508HS.1	Acquire vocabulary and use it to communicate to others.	L2
EN508HS.2	Understand and enhance their proficiency in Reading.	L2
EN508HS.3	Apply relevant formats of writing paragraph, e-mail and letter writing ,resume and report writing.	L2
EN508HS.4	Plan their ideas to give oral presentations like seminars, ppt.	L2

B.TECH III YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: **ANTENNAS AND PROPAGATION**

Course Code: EC601PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC601PC.1	Characterize the antennas based on frequency, configure the geometry and establish the radiation patterns of VHF, UHF and Microwave antennas and also antenna arrays.	L2
EC601PC.2	Specify the requirements for microwave measurements and arrange a setup to carry out the antenna far zone pattern and gain measurements in the laboratory	L2
EC601PC.3	Classify the different wave propagation mechanisms, determine the characteristic features of different wave propagations, and estimate the parameters involved.	L1


B.TECH III YEAR II SEM ECE(R18)A.Y: 2021-2022



  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC Estd : 1999 JNTUH College Code : 86



**MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY**  
 (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)  
 P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (MdI. & Dist.) - 505174, Telangana State.  
 Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472023, +91 9842705545, +91 9989955556.

Name of the Course: DIGITAL SIGNAL PROCESSING

Course Code: EC602PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC602PC.1	Understand the LTI system characteristics and Multi-rate signal processing.	L2
EC602PC.2	Understand the inter-relationship between DFT and various transforms.	L2
EC602PC.3	Design a digital filter for a given specification.	L1
EC602PC.2	Understand the significance of various filter structures and effects of round off errors.	L2

B.TECH III YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: VLSI DESIGN

Course Code: EC603PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC603PC.1	Acquire qualitative knowledge about the fabrication process of integrated circuits using MOS transistors.	L2
EC603PC.2	Draw the layout of any logic circuit which helps to understand and estimate parasitic effect of any logic circuit	L2
EC603PC.3	Design building blocks of data path systems, memories and simple logic circuits using PLA, PAL, FPGA and CPLD.	L1
EC603PC.3	Understand different types of faults that can occur in a system and learn the concept of testing and adding extra hardware to improve testability of system.	L1

B.TECH III YEAR II SEM ECE (R18)



*Yreese (-*  
**PRINCIPAL**  
 MOTHER THERESA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



### MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.06@gmail.com Contact : +91 9649472523, +91 9542709545, +91 9989959556.

Name of the Course: MOBILE COMMUNICATIONS AND NETWORKS

Course Code: EC612PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC612PE.1	Known the evolution of cellular and mobile communication system.	L2
EC612PE.2	The student will be able to understand Co-Channel and Non-Co-Channel interferences.	L2
EC612PE.3	Understand impairments due to multipath fading channel and how to overcome the different fading effects	L1
EC612PE.3	Familiar with cell coverage for signal and traffic, diversity, techniques, frequency management, Channel assignment and types of handoff.	L1
EC612PE.3	Know the difference between cellular and Adhoc Networks and design goals of MAC Layer protocol	L1

B.TECH III YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: SCRIPTING LANGUAGES LAB

Course Code: EC606PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC606PC.1	Ability to understand the differences between Scripting languages and programming languages	L2
EC606PC.2	Able to gain some fluency programming in Ruby, Perl, TC	L2

B.TECH III YEAR II SEM ECE (R18)

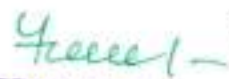
A.Y: 2021-2022


Name of the Course: E-CAD LAB

Course Code: EC605PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC605PC.1	Design and Realization logic gates implementation using HDL.	L2
EC605PC.2	Design and implement combinational circuits using	L2



 20  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Pc.), Peddabankuru (Vill), PEDDAPALLI (Mdi. & Dist.) - 505174, Telangana State. Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542708545, +91 9869958556		

	HDL.	
EC605PC.2	Design and implement Sequential circuits using HDL.	L2
EC605PC.2	Design basic gates and observe the layout ,physical verification,timing,IR analysis and cross talk analysis .	L2
EC605PC.2	Design CMOS NAND/NOR and observe the layout ,physical verification,timing,IR analysis and cross talk analysis ..	L2

B.TECH III YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: Digital Signal Processing Lab

Course Code: EC604PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC604PC.1	Design of various signal functions.	L2
EC604PC.2	Implement and justify any arbitrary signal in time and frequency domains	L2
EC604PC.2	Design the characteristics and of IIR digital filters.	L2
EC604PC.2	Analyze the signals with design of FIR digital filters using windowing techniques.	L2
EC604PC.2	Designs the Impulse responses of signals.	L2

B.TECH III YEAR II SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: ENVIRONMENTAL SCIENCE

Course Code: \*MC609

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC609.1	Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development	L2



  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: MICROWAVE AND OPTICAL COMMUNICATIONS (PC)

Course Code: EC701PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC701PC.1	Known power generation at microwave frequencies and derive the performance characteristics	L2
EC701PC.2	realize the need for solid state microwave sources and understand the principles of solid state devices	L2
EC701PC.3	distinguish between the different types of waveguide and ferrite components, and select proper components for engineering applications	L1
EC701PC.4	Understand the utility of S-parameters in microwave component design and learn the measurement procedure of various microwave parameters.	L1
EC701PC.5	understand the mechanism of light propagation through Optical Fibers	L1

B.TECH IV YEAR I SEM ECE (R18)


A.Y: 2021-2022


Name of the Course: DIGITAL IMAGE PROCESSING

Course Code: EC713PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC713PE.1	Explore the fundamental relations between pixels and utility of 2-D transforms in image processor	L2
EC713PE.2	Understand the enhancement, segmentation and restoration processes on an image.	L2
EC713PE.3	Implement the various Morphological operations on an image Understand the need of compression and evaluation of basic compression algorithms	L1



  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI - 505174

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Pa.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec06.ac.in E-mail: mtec.06@gmail.com Contact : +91 9849472023, +91 9942709545, +91 9088095566.		

B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: DATABASE MANAGEMENT SYSTEMS

Course Code: EC722PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC722PE.1	Gain knowledge of fundamentals of DBMS, database design and normal forms	L2
EC722PE.2	Master the basics of SQL for retrieval and management of data.	L2
EC722PE.3	Be acquainted with the basics of transaction processing and concurrency control	L1

B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: NETWORK SECURITY AND CRYPTOGRAPHY

Course Code: EC723PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC723PE.1	Describe network security fundamental concepts and principles	L2
EC723PE.2	Encrypt and decrypt messages using block ciphers and network security technology and protocols	L2
EC723PE.3	Analyze key agreement algorithms to identify their weaknesses	L1



*Y. Kesava Reddy*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 P.P.


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9009900050.

B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: PROFESSIONAL PRACTICE, LAW AND ETHICS

Course Code: SM702MS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
SM702MS.1	The students will understand the importance of professional practice, Law and Ethics in their personal lives and professional careers. The students will learn the rights and responsibilities as an employee, team member and a global citizen	L2

B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: INDUSTRY ORIENTED MINI PROJECT

Course Code: EC704PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC704PC.1	Design identifies basic requirement for an application and process a effective solution.	L2
EC704PC.2	Build knowledge through practical assignments and learn the various design methods for solving problems.	L2
EC704PC.3	Develop skill to build design techniques for various problem analyses.	L2
EC704PC.4	Summarize the fundamental concepts and techniques used in mini project.	L2



PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b>		
(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)		
P.P.Colony (Po.), Peddabonkurru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.		
Website : www.mtec86.ac.in    E-mail: mtec.86@gmail.com    Contact : +91 9849472523, +91 9542706545, +91 9089906556.		

B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022

Name of the Course: SEMINAR

Course Code: EC705PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC705PC.1	Design identifies basic requirement for an application and process a effective solution.	L2
EC705PC.2	Build knowledge through practical assignments and learn the various design methods for solving problems.	L2
EC705PC.3	Develop skill to build design techniques for various problem analyses.	L2
EC705PC.4	Summarize the fundamental concepts and techniques used in mini project.	L2

B.TECH IV YEAR I SEM ECE (R18)

A.Y: 2021-2022


Name of the Course: PROJECT STAGE-I

Course Code: EC706PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC706PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
EC706PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
EC706PC.3	Develop a final product/process, perform testing, arrive at results & conclusions and suggest future directions.	L2
EC706PC.4	Make up project enables the student to understand the business process	L2



  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
	<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)	
P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.		
Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9842709545, +91 9889950556.		

B.TECH IV YEAR II SEM ECE ( R18)

A.Y: 2021-2022

Name of the Course: SATELLITE COMMUNICATIONS

Course Code: SM801MS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
SM801MS.1	Envision the satellite sub systems and design satellite links for specified C/N.	L2

B.TECH IV YEAR II SEM ECE ( R18)

A.Y: 2021-2022

Name of the Course: LOW POWER VLSI DESIGN

Course Code: EC823PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC823PE.1	Understand the need of Low power circuit design.	L2
EC823PE.2	Attain the knowledge of architectural approaches.	L2
EC823PE.3	Analyze and design Low-Voltage Low-Power combinational circuits	L2
EC823PE.4	Known the design of Low-Voltage Low-Power Memories	L2

B.TECH IV YEAR II SEM ECE ( R18)

A.Y: 2021-2022


Name of the Course: RADAR SYSTEMS

Course Code: EC812PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC812PE.1	Derive the complete radar range equation	L2
EC812PE.2	Understand the need and functioning of CW, FM-CW and MTI radars	L2
EC812PE.3	Known various Tracking methods	L2
EC812PE.4	Derive the matched filter response characteristics for radar receivers	L2



*Freeel* - 26  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State. Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989958556		

B.TECH IV YEAR II SEM ECE ( R18)

A.Y: 2021-2022

Name of the Course: PROJECT STAGE-II

Course Code: EC801PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EC801PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
EC801PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
EC801PC.3	Develop a final product/process, perform testing ,arrive at results &conclusions and suggest future directions	L2
EC801PC.4	Make a paper for conference presentation/publication, if possible.	L2
EC801PC.5	Make up project enables the student to understand the business process	L2



  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**





## Department of Computer Science and Engineering

## Regulation: R18

## First year First Semester

B.TECH I YEAR I SEM CSE (R18)

Name of the Course: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vectors	L3
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L2
MA101BS.4	Solve the applications on the mean value theorems.	L3
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L2
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L2
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L3

B.TECH I YEAR I SEM ECE (R18)

Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE103ES.1	Understand and analyze basic Electrical circuits	L2
EE103ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE103ES.3	Introduce components of Low Voltage Electrical Installations..	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 8640472523, +91 8642709545, +91 9989939556

**B.TECH | YEAR | SEMECE (R18)**

Name of the Course: Engineering Workshop

Course Code: ME105ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME105ES.1	Study and practice on machine tools and their operations	L2
ME105ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME105ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME105ES.4	Apply basic electrical engineering knowledge for house wiring practice.	L3

**B.TECH | YEAR | SEM CSE (R18)**

Course Name: ENGLISH

Course Code: EN105HS

Course Outcome No	Course Outcome Statement	B.T Level
EN105HS.1	Use English Language effectively in spoken and written forms	L3
EN105HS.2	Comprehend the given texts and respond appropriately.	L2
EN105HS.3	Communicate confidently in various contexts and different cultures.	L2
EN105HS.4	Acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.	L2



4

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Med. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 8849472523, +91 9542709545, +91 9989959356

B.TECH I YEAR I SEM CSE (R18)

 Name of the Course: **ENGINEERING CHEMISTRY LABORATORY** Course Code : CH106BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH106BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH106BS.2	Able to perform methods such as conductometry, potentiometric and pH merry in order to find out the concentrations or equivalence points of acids and bases	L2
CH106BS.3	Students are able to prepare polymers like bake lite and nylon-6.	L2
CH106BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3

B.TECH I YEAR I SEM CSE (R18)

 Name of the Course: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN107HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN107HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN107HS.2	Neutralize their accent for intelligibility	L2
EN107HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3



PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9242709545, +91 9989959556.

B.TECH I YEAR I SEMECE (R18)

Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE108ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE108ES.1	Understand and analyze basic Electrical circuits	L2
EE108ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE108ES.3	Introduce components of Low Voltage Electrical Installations..	L2

### Frist Year Second Semester

B.TECH I YEAR II SEM CSE (R18)

Course Name: MATHEMATICS - II

Course Code: MA201BS

Course Outcome No	Course Outcome Statement	B.T Level
MA201BS.1	Identify whether the given differential equation of first order is exact or not	L3
MA201BS.2	Solve higher differential equation and apply the concept of differential equation to real world problems	L3
MA201BS.3	Evaluate the multiple integrals and apply the concept to find areas, volumes, centre of mass and Gravity for cubes, sphere and rectangular parallelopiped	L5
MA201BS.4	Evaluate the line, surface and volume integrals and converting them from one to another	L5



*Yaswanth*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 8849472023, +91 9542709545, +91 9580959558.

**B.TECH I YEAR II SEM CSE (R18)**
**Course Name: APPLIED PHYSICS**
**Course Code: AP202BS**

Course Outcome No	Course Outcome Statement	B.T Level
AP202BS.1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	L2
AP202BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	L2
AP202BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	L3
AP202BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials	L2

**B.TECH I YEAR II SEM CSE (R18)**
**Course Name: PROGRAMMING FOR PROBLEM SOLVING**
**Course Code: AP205BS**

Course Outcome No	Course Outcome Statement	B.T Level
AP205BS.1	To write algorithms and to draw flowcharts for solving problems.	L3
AP205BS.2	To convert the algorithms/flowcharts to C programs	L2
AP205BS.3	To code and test a given logic in C programming language.	L5
AP205BS.4	To use arrays, pointers, strings and structures to write C programs	L3
AP205BS.5	Searching and sorting problems.	L2



*Yessent*

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi &amp; Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mtl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9942709545, +91 9989958008.

**B.TECH I YEAR II SEM CSE (R18)**
**Course Name: ENGINEERING GRAPHICS**
**Course Code: ME204ES**

Course Outcome No	Course Outcome Statement	B.T Level
ME204ES.1	Preparing working drawings to communicate the ideas and information.	L2
ME204ES.2	Read, understand and interpret engineering drawings.	L2

**B.TECH I YEAR II SEM CSE (R18)**
**Name of the Course: APPLIED PHYSICS LABORATORY**
**Course Code: AP205BS**

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP205BS.1	Know the determination of the Planck's constant using Photo electric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
AP205BS.2	Appreciate quantum physics in semiconductor devices and optoelectronics	L2
AP205BS.3	Gain the knowledge of applications of dielectric constant	L2
AP205BS.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
AP205BS.5	Carried out data analysis	L2



**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Med. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec88.ac.in E-mail: mtec.88@gmail.com Contact : +91 9849472323, +91 9542709545, +91 9989909556.

**B.TECH I YEAR II SEM CSE (R18)**
**Course Name: PROGRAMMING FOR PROBLEM SOLVING LAB Course Code: CS106E**

Course Outcome No	Course Outcome Statement	B.T Level
CS106E.1	formulate the algorithms for simple problems	L2
CS106E.2	translate given algorithms to a working and correct program	L3
CS106E.3	correct syntax errors as reported by the compiler	L4
CS106E.4	identify and correct logical errors encountered during execution	L5
CS106E.5	represent and manipulate data with arrays, strings and structure	L3

**B.TECH I YEAR II SEM CSE (R18)**
**Course Name: ENVIRONMENTAL SCIENCE**
**Course Code: MC109ES**

Course Outcome No	Course Outcome Statement	B.T Level
MC109ES.1	Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development	L2



Yessssss!

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174



## Second Year First Semesters

B.TECH II YEAR I SEM CSE (R18)

Name of the Course: ANALOG AND DIGITAL ELECTRONICS

Course Code: CS301ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS301ES.1	Know the characteristics of various components	L2
CS301ES.2	Understand the utilization of components	L3
CS301ES.3	Design and analyze small signal amplifier circuits	L2
CS301ES.4	Learn Postulates of Boolean algebra and to minimize combinational functions	L2
CS301ES.5	Design and analyze combinational and sequential circuits	L2

B.TECH II YEAR I SEM CSE (R18)

Name of the Course: DATA STRUCTURES

Course Code: CS302ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS302ES.1	Ability to select the data structures that efficiently model the information in a problem.	L2
CS302ES.2	Ability to assess efficiency trade-offs among different data structure implementations or combinations.	L3
CS302ES.3	Implement and know the application of algorithms for sorting and pattern matching	L2
CS302ES.4	Design programs using a variety of data structures, including hash tables, binary and general tree structures, search trees, tries, heaps, graphs, and AVL-trees.	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec08.ac.in E-mail: mtec.08@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

**B.TECH II YEAR I SEM CSE (R18)**

Name of the Course: COMPUTER ORIENTED STATISTICAL METHODS Course Code: MA303BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA303BS.1	Apply the concepts of probability and distributions to some case studies	L2
MA303BS.2	Correlate the material of one unit to the material in other units	L3
MA303BS.3	Resolve the potential misconceptions and hazards in each topic of study	L2

**B.TECH II YEAR I SEM CSE (R18)**

Name of the Course: COMPUTER ORGANIZATION AND ARCHITECTURE Course Code: CS304PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS304PC.1	Understand the basics of instructions sets and their impact on processor design.	L2
CS304PC.2	Demonstrate an understanding of the design of the functional units of a digital computer system	L3
CS304PC.3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory.	L2
CS304PC.4	Design a pipeline for consistent execution of instructions with minimum hazards.	L2



Yaswanth

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi &amp; Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po), Peddabankuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959536

**B.TECH II YEAR I SEM CSE (R18)**

Name of the Course: OBJECT ORIENTED PROGRAMMING USING C++ Course Code: CS305PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS305PC.1	Able to develop programs with reusability	L2
CS305PC.2	Develop programs for file handling	L3
CS305PC.3	Handle exceptions in programming	L2
CS305PC.4	Develop applications for a range of problems using object-oriented programming techniques	L2

**B.TECH II YEAR I SEM CSE (R18)**

Name of the Course: ANALOG AND DIGITAL ELECTRONICS LAB Course Code: CS306ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS306ES.1	Know the characteristics of various components	L2
CS306ES.2	Understand the utilization of components	L3
CS306ES.3	Design and analyze small signal amplifier circuits	L2
CS306ES.4	Postulates of Boolean algebra and to minimize combinational functions	L2

**B.TECH II YEAR I SEM CSE (R18)**

Name of the Course: DATA STRUCTURES LAB Course Code: CS307PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS307PC.1	Know the characteristics of various components	L2
CS307PC.2	Understand the utilization of components	L3
CS307PC.3	Design and analyze small signal amplifier circuits	L2
CS307PC.4	Postulates of Boolean algebra and to minimize combinational functions	L2



**B.TECH II YEAR I SEM CSE (R18)**

Name of the Course: C++ PROGRAMMING LAB

Course Code: CS309PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS309PC.1	Ability to develop applications for a range of problems using object-oriented programming techniques	L3

**Second Year Second Semesters****B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: GENDER SENSITIZATION LAB

Course Code: \*MC309/\*MC409

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC309.1	To develop students' sensibility with regard to issues of gender in contemporary India.	L2
*MC309.2	To provide a critical perspective on the socialization of men and women.	L3
*MC309.3	To introduce students to information about some key biological aspects of genders	L2
*MC309.4	To expose the students to debates on the politics and economics of work.	L2

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: DISCRETE MATHEMATICS

Course Code: CS401PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS401PC.1	Ability to understand and construct precise mathematical proofs	L2
CS401PC.2	Ability to use logic and set theory to formulate precise statements	L3
CS401PC.3	Ability to analyze and solve counting problems on finite and discrete structures	L2
CS401PC.4	Ability to apply graph theory in solving computing problem	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Pa.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec88.ac.in E-mail: mtec.88@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989050588.

**B.TECH II YEAR II SEM CSF (R18)**

Name of the Course: BUSINESS ECONOMICS AND FINANCIAL ANALYSIS

Course Code: SM402MS/SM305MS:

Course Outcome NO	Course Outcome Statement	B.T LEVEL
SM402MS.1	The students will understand the various Forms of Business and the impact of economic variables on the Business. The Demand, Supply, Production, Cost, Market Structure, Pricing aspects are learnt. The Students can study the firm's financial position by analysing the Financial Statements of a Company	L2

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: OPERATING SYSTEMS

Course Code: CS403PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS403PC.1	Will be able to control access to a computer and the files that may be shared	L2
CS403PC.2	Demonstrate the knowledge of the components of computer and their respective roles in computing.	L3
CS403PC.3	Ability to recognize and resolve user problems with standard operating environments	L2
CS403PC.4	Gain practical knowledge of how programming languages, operating systems, and architectures interact and how to use each effectively.	L2





**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: DATABASE MANAGEMENT SYSTEMS

Course Code: CS404PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS404PC.1	Gain knowledge of fundamentals of DBMS, database design and normal forms	L2
CS404PC.2	Master the basics of SQL for retrieval and management of data.	L3
CS404PC.3	Be acquainted with the basics of transaction processing and concurrency control.	L2
CS404PC.4	Familiarity with database storage structures and access techniques	L2

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: JAVA PROGRAMMING

Course Code: CS405PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS405PC.1	Able to solve real world problems using OOP techniques	L2
CS405PC.2	Able to understand the use of abstract classes.	L3
CS405PC.3	Able to solve problems using java collection framework and I/O classes.	L2
CS405PC.4	Able to develop multithreaded applications with synchronization.	L2

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: OPERATING SYSTEMS LAB

Course Code: CS406PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS406PC.1	Simulate and implement operating system concepts such as scheduling, deadlock management, file management and memory management.	L2
CS406PC.2	Able to implement C programs using Unix system calls	L3




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mol. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact: +91 9849472523, +91 9542709545, +91 9869903558.

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: DATABASE MANAGEMENT SYSTEMS LAB

Course Code: CS407PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS407PC.1	Design database schema for a given application and apply normalization	L2
CS407PC.2	Acquire skills in using SQL commands for data definition and data manipulation	L3
CS407PC.3	Develop solutions for database applications using procedures, cursors and triggers	L3

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: JAVA PROGRAMMING LAB

Course Code: CS408PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS408PC.1	Able to write programs for solving real world problems using java collection frame work	L2
CS407PC.2	Able to write programs using abstract classes, multithreaded programs	L3
CS407PC.3	Able to write GUI programs using swing controls in Java.	L3

**B.TECH II YEAR II SEM CSE (R18)**

Name of the Course: CONSTITUTION OF INDIA

Course Code: \*MC409/\*MC309

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC409.1	Understand historical background of the constitution making and its importance for building a democratic India	L2
*MC409.2	Understand the functioning of three wings of the government i.e. executive, Legislative and judiciary.	L2
*MC409.3	Understand the value of the fundamental rights and duties for becoming good citizen of India.	L2



Yes sir -

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec88.ac.in E-mail: mtec.88@gmail.com Contact : +91 9849472525, +91 9542709545, +91 9889909556.

### Third Year First Semester

B.TECH III YEAR I SEM CSE (R18)

Name of the Course: **FORMAL LANGUAGES AND AUTOMATA THEORY** Course Code: **CS501PC**

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS501PC.1	Able to understand the concept of abstract machines and their power to recognize the Languages.	L2
CS501PC.2	Able to employ finite state machines for modeling and solving computing problems.	L3
CS501PC.3	Able to design context free grammars for formal languages.	L3
CS501PC.3	Able to distinguish between decidability and undesirability.	L3

B.TECH III YEAR I SEM CSE (R18)

Name of the Course: **SOFTWARE ENGINEERING**

Course Code: **CS502PC**

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS502PC.1	Ability to translate end-user requirements into system and software requirements, using e.g. UML, and structure the requirements in a Software Requirements Document (SRD).	L2
CS502PC.2	Identify and apply appropriate software architectures and patterns to carry out high level design of a system and be able to critically compare alternative choices.	L3
CS502PC.3	Will have experience and/or awareness of testing problems and will be able to develop a simple testing report.	L3



*Yaswanth*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi &amp; Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec86@gmail.com Contact: +91 9849472323, +91 9542709545, +91 9999059556.

**B.TECH III YEAR I SEM CSE (R18)**

Name of the Course: COMPUTER NETWORKS

Course Code: CS503PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS503PC.1	Gain the knowledge of the basic computer network technology	L2
CS503PC.2	Gain the knowledge of the functions of each layer in the OSI and TCP/IP reference model.	L3
CS503PC.3	Familiarity with the essential protocols of computer networks, and how they can be applied in network design and implementation.	L3

**B.TECH III YEAR I SEM CSE (R18)**

Name of the Course: WEB TECHNOLOGIES

Course Code: CS504PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS504PC.1	gain knowledge of client-side scripting, validation of forms and AJAX programming	L2
CS504PC.2	understand server-side scripting with PHP language	L3
CS504PC.3	To introduce Server-side programming with Java Servlets and JSP	L3

**B.TECH III YEAR I SEM CSE (R18)**

Name of the Course: INFORMATION THEORY &amp; CODING (Professional Elective - I)

Course Code: CS511PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS511PE.1	Learn measurement of information and errors.	L2
CS511PE.2	Obtain knowledge in designing various source codes and channel codes	L3
CS511PE.3	Understand the significance of codes in various applications	L3



*Yaseen*

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556

### B.TECH III YEAR I SEM CSE (R18)

Name of the Course: DISTRIBUTED DATABASES (Professional Elective - II) **Course Code:** CS524PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS524PE.1	Understand theoretical and practical aspects of distributed database systems	L2
CS524PE.2	Study and identify various issues related to the development of distributed database system.	L3
CS524PE.3	Understand the design aspects of object-oriented database system and related development	L3

### B.TECH III YEAR I SEM CSE (R18)

Name of the Course: SOFTWARE ENGINEERING LAB

**Course Code:** CS505PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS505PC.1	Ability to translate end-user requirements into system and software requirements	L2
CS505PC.2	Ability to generate a high-level design of the system from the software requirements	L3
CS505PC.3	Will have experience and/or awareness of testing problems and will be able to develop a simple testing report.	L3

### B.TECH III YEAR I SEM CSE (R18)

Name of the Course: COMPUTER NETWORKS AND WEB TECHNOLOGIES LAB

**Course Code:** CS506PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS506PC.1	Implement data link layer framing methods	L2
CS506PC.2	Analyze error detection and error correction codes	L3
CS506PC.3	To be able to work with different network tools	L2



**Third Year Second Semester****B.TECH III YEAR II SEM CSE (R18)**

Name of the Course: MACHINE LEARNING

Course Code: CS601PC

Course Outcome NO	Course Outcome Statement	B.T. LEVEL
CS601PC.1	Understand the concepts of computational intelligence like machine learning	L2
CS601PC.2	Ability to get the skill to apply machine learning techniques to address the real time problems in different areas	L3
CS601PC.3	Understand the Neural Networks and its usage in machine learning application.	L2

**B.TECH III YEAR II SEM CSE (R18)**

Name of the Course: COMPILER DESIGN

Course Code: CS602PC

Course Outcome NO	Course Outcome Statement	B.T. LEVEL
CS602PC.1	Demonstrate the ability to design a compiler given a set of language features	L2
CS602PC.2	Design algorithms to do code optimization in order to improve the performance of a program in terms of space and time complexity	L3
CS602PC.3	Acquire skills in using lex tool & yacc tool for developing a scanner and parser.	L2



*Yaseer*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9842709545, +91 9989919558.

**B.TECH III YEAR II SEM CSE (R18)**

Name of the Course: DESIGN AND ANALYSIS OF ALGORITHMS

Course Code: CS603PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS603PC.1	Ability to analyze the performance of algorithms	L2
CS603PC.2	Ability to choose appropriate data structures and algorithm design methods for a specified application	L3
CS603PC.3	Ability to understand how the choice of data structures and the algorithm design methods impact the performance of programs	L2

**B.TECH III YEAR II SEM CSE (R18)**

Name of the Course: SCRIPTING LANGUAGES (Professional Elective - III)

Course Code: CS613PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS613PE.1	Comprehend the differences between typical scripting languages and typical system and application programming languages	L2
CS613PE.2	Gain knowledge of the strengths and weakness of Perl, TCL and Ruby; and select an appropriate language for solving a given problem	L3
CS613PE.3	Acquire programming skills in scripting language	L2

**B.TECH III YEAR II SEM CSE (R18)**

Name of the Course: MACHINE LEARNING LAB

Course Code: CS604PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS604PC.1	understand complexity of Machine Learning algorithms and their limitations;	L2
CS604PC.2	be capable of confidently applying common Machine Learning algorithms in practice and implementing their own;	L3
CS604PC.3	Be capable of performing experiments in Machine Learning using real-world data.	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 88



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (M.H. & Dist.) - 505174, Telangana State.

Website: www.mtec88.ac.in E-mail: mtec.88@gmail.com Contact: +91 8049472523, +91 9542709549, +91 9989999556.

### B.TECH III YEAR II SEM CSE (R18)

Name of the Course: COMPILER DESIGN LAB

Course Code: CS605PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS605PC.1	Design and develop interactive and dynamic web applications using HTML, CSS, JavaScript and XML	L2
CS605PC.2	Apply client-server principles to develop scalable and enterprise web applications	L3
CS605PC.3	Able to use lex and yacc tools for developing a scanner and a parser.	L2

### B.TECH III YEAR II SEM CSF (R18)


Name of the Course: NETWORK PROGRAMMING LAB

Course Code: CS622PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS622PE.1	To write socket API based programs	L2
CS622PE.2	To design and implement client-server applications using TCP and UDP sockets	L3
CS622PE.3	To analyze network programs	L2



*Success*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
	<b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)	
P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.		
Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 8849472523, +91 9542709545, +91 9989956558		

## Fourth Year First Semester

**B.TECH IV YEAR I SEM CSE (R18)**

Name of the Course: CRYPTOGRAPHY AND NETWORK SECURITY

Course Code: CS701PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS701PC.1	Student will be able to understand basic cryptographic algorithms, message and web authentication and security issues	L2
CS701PC.2	Ability to identify information system requirements for both of them such as client and server.	L3
CS701PC.3	Ability to understand the current legal issues towards information security.	L2

**B.TECH IV YEAR I SEM CSE (R18)**

Name of the Course: DATA MINING

Course Code: CS702PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS702PC.1	Ability to understand the types of the data to be mined and present a general classification of tasks and primitives to integrate a data mining system	L2
CS702PC.2	Extract interesting patterns from large amounts of data.	L3
CS702PC.3	Evaluate the accuracy of supervised and unsupervised models and algorithms.	L2



*Yaswanth*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9949472523, +91 9942709540, +91 9989959556.

**B.TECH IV YEAR I SEM CSE (R18)**

Name of the Course: ARTIFICIAL INTELLIGENCE

Course Code: CS713PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS713PE.1	Ability to formulate an efficient problem space for a problem expressed in natural language.	L2
CS713PE.2	Possess the skill for representing knowledge using the appropriate technique for a given problem	L3
CS713PE.3	Possess the ability to apply AI techniques to solve problems of game playing, and machine learning.	L2

**B.TECH IV YEAR I SEM CSE (R18)**

Name of the Course: INTERNET OF THINGS

Course Code: CS724PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS724PE.1	Compare and contrast the deployment of smart objects and the technologies to connect them to network	L2
CS724PE.2	Appraise the role of IoT protocols for efficient network communication.	L3
CS724PE.3	Elaborate the need for Data Analytics and Security in IoT.	L2

**B.TECH IV YEAR I SEM CSE (R18)**

Name of the Course: CRYPTOGRAPHY AND NETWORK SECURITY LAB

Course Code: CS703PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS703PC.1	Gain knowledge of software economics, phases in the life cycle of software development, project organization, project control and process instrumentation	L2



Yessssss!

**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472623, +91 9542708945, +91 9989958556.

B.TECH IV YEAR I SEM CSE (R18)

Name of the Course: INDUSTRY ORIENTED MINI PROJECT

Course Code: CS704PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS704PC .1	Design identifies basic requirement for an application and process a effective solution.	L2
CS704PC .2	Build knowledge through practical assignments and learn the various design methods for solving problems.	L2
CS704PC .3	Develop skill to build design techniques for various problem analyses.	L2
CS704PC .4	Summarize the fundamental concepts and techniques used in mini project.	L2

B.TECH IV YEAR I SEM CSE (R18)

Name of the Course: SEMINAR

Course Code: CS705PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS705PC.1	Design identifies basic requirement for an application and process a effective solution.	L2
CS705PC.2	Build knowledge through practical assignments and learn the various design methods for solving problems.	L2
CS705PC.3	Develop skill to build design techniques for various problem analyses.	L2
CS705PC.4	Summarize the fundamental concepts and techniques used in mini project.	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



**MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989950598.

B.TECH IV YEAR I SEM CSE (R18)

Name of the Course: PROJECT STAGE-I

Course Code: CS706PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS706PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
CS706PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
CS706PC.3	Develop a final product/process, perform testing, arrive at results &conclusions and suggest future directions.	L2
CS706PC.4	Make up project enables the student to understand the business process	L2



*Y. Sreenivasulu*  
**PRINCIPAL**  
MOTHER THERESA  
College of Engineering & Technology  
PEDDAPALLI-505 174





## Fourth year Second Semester

B.TECH IV YEAR II SEM CSE (R18)

Name of the Course: ORGANIZATIONAL BEHAVIOUR

Course Code: SM801MS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
SM801MS.1	framework and the theories underlying Organizational Behaviors.	L2

B.TECH IV YEAR II SEM CSE (R18)

Name of the Course: DISTRIBUTED SYSTEMS

Course Code: CS812PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS812PE.1	Ability to understand Transactions and Concurrency control.	L2
CS812PE.2	Ability to understand Security issues.	L2
CS812PE.3	Understanding Distributed shared memory	L2
CS812PE.4	Ability to design distributed systems for basic level applications.	L3

B.TECH IV YEAR II SEM CSE (R18)

Name of the Course: HUMAN COMPUTER INTERACTION

Course Code: CS814PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS814PE.1	Ability to apply HCI and principles to interaction design.	L2
CS814PE.2	Ability to design certain tools for blind or PH people	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Md. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

B.TECH IV YEAR II SEM CSE (R18)

Name of the Course: PROJECT STAGE-II

Course Code: CS802PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CS802PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
CS802PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
CS802PC.3	Develop a final product/process, perform testing ,arrive at results &conclusions and suggest future directions	L3
CS802PC.4	Make a paper for conference presentation/publication, if possible.	L3
CS802PC.5	Make up project enables the student to understand the business process	L3



*Yaceent*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**Department Of Computer Science and Information Technology****Regulation: R18****First Year First Semester**

B.TECH I YEAR I SEM CSIT

Name of the Course: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vectors	L3
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L2
MA101BS.4	Solve the applications on the mean value theorems.	L3
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L2
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L2
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L3

B.TECH I YEAR I SEM CSIT

Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE103ES.1	Understand and analyze basic Electrical circuits	L2
EE103ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE103ES.3	Introduce components of Low Voltage Electrical Installations..	L2





**B.TECH | YEAR | SEM CSIT**

Name of the Course: Engineering Workshop

Course Code: ME105ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME105ES.1	Study and practice on machine tools and their operations	L2
ME105ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME105ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME105ES.4	Apply basic electrical engineering knowledge for house wiring practice.	L3

**B.TECH | YEAR | SEM CSIT**

Course Name: ENGLISH

Course Code: EN105HS

Course Outcome No	Course Outcome Statement	B.T Level
EN105HS.1	Use English Language effectively in spoken and written forms	L3
EN105HS.2	Comprehend the given texts and respond appropriately.	L2
EN105HS.3	Communicate confidently in various contexts and different cultures.	L2
EN105HS.4	Acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.	L2



**B.TECH I YEAR I SEM CSIT**Name of the Course: **ENGINEERING CHEMISTRY LABORATORY** Course Code : CH106BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH106BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH106BS.2	Able to perform methods such as conductometry, potentiometric and pH merry in order to find out the concentrations or equivalence points of acids and bases	L2
CH106BS.3	Students are able to prepare polymers like bake lite and nylon-6.	L2
CH106BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3

**B.TECH I YEAR I SEM CSIT**Name of the Course: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN107HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN107HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN107HS.2	Neutralize their accent for intelligibility	L2
EN107HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3



**B.TECH I YEAR I SEMCSIT**Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE108ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE108ES.1	Understand and analyze basic Electrical circuits	L2
EE108ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE108ES.3	Introduce components of Low Voltage Electrical Installations.:	L2

**FIRST YEAR SECOND SEMESTER****B.TECH I YEAR II SEM CSIT**

Course Name: MATHEMATICS - II

Course Code: MA201BS

Course Outcome No	Course Outcome Statement	B.T Level
MA201BS.1	Identify whether the given differential equation of first order is exact or not	L4
MA201BS.2	Solve higher differential equation and apply the concept of differential equation to real world problems	L3
MA201BS.3	Evaluate the multiple integrals and apply the concept to find areas, volumes, centre of mass and Gravity for cubes, sphere and rectangular parallelepiped	L5
MA201BS.4	Evaluate the line, surface and volume integrals and converting them from one to another	L5



**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI



## B.TECH | YEAR II SEM CSIT

Course Name: APPLIED PHYSICS

Course Code: AP202BS

Course Outcome No	Course Outcome Statement	B.T Level
AP202BS.1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	L2
AP202BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	L2
AP202BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	L3
AP202BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials	L2

## B.TECH | YEAR II SEM CSIT

Course Name: PROGRAMMING FOR PROBLEM SOLVING

Course Code: AP205BS

Course Outcome No	Course Outcome Statement	B.T Level
AP205BS.1	To write algorithms and to draw flowcharts for solving problems.	L3
AP205BS.2	To convert the algorithms/flowcharts to C programs	L3
AP205BS.3	To code and test a given logic in C programming language.	L4
AP205BS.4	To use arrays, pointers, strings and structures to write C programs	L3
AP205BS.5	Searching and sorting problems.	L2



**B.TECH I YEAR II SEM CSIT**

Course Name: ENGINEERING GRAPHICS

Course Code: ME204ES

Course Outcome No	Course Outcome Statement	B.T Level
ME204ES.1	Preparing working drawings to communicate the ideas and information.	L2
ME204ES.2	Read, understand and interpret engineering drawings.	L2

**B.TECH I YEAR I SEM CSIT**Name of the Course: **APPLIED PHYSICS LABORATORY**

Course Code: AP205BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP205BS.1	Know the determination of the Planck's constant using Photo electric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
AP205BS.2	Appreciate quantum physics in semiconductor devices and optoelectronics.	L2
AP205BS.3	Gain the knowledge of applications of dielectric constant	L2
AP205BS.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
AP205BS.5	Carried out data analysis	L2



**B.TECH | YEAR II SEM CSIT****Course Name: PROGRAMMING FOR PROBLEM SOLVING LAB Course Code: CS106E**

Course Outcome No	Course Outcome Statement	B.T Level
CS106E.1	formulate the algorithms for simple problems	L3
CS106E.2	translate given algorithms to a working and correct program	L4
CS106E.3	correct syntax errors as reported by the compiler	L5
CS106E.4	identify and correct logical errors encountered during execution	L5
CS106E.5	represent and manipulate data with arrays, strings and structure	L2

**B.TECH | YEAR II SEM CSIT****Course Name: ENVIRONMENTAL SCIENCE Course Code: MC109ES**

Course Outcome No	Course Outcome Statement	B.T Level
MC109ES.1	Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development	L2





**B.TECH I YEAR IISEM CSIT**

**COURSE NAME: ANALOG AND DIDGITAL ELECTRONICS**

Course Code : CS301ES

Course Code	Course Outcome	BT level
CS301ES.1	Know the characteristics of various components. Know about the logic families and realization of logic Gates.	L2
CS301ES.2	Understand the utilization of components.	L3
CS301ES.3	Design and analyze small signal amplifier circuits.	L4
CS301ES.4	Learn Postulates of Boolean algebra and to minimize Combinational functions.	L2
CS301ES.5	Design and analyze combinational and sequential circuits.	L4

**B.TECH I YEAR IISEM CSIT**

**COURSE NAME: DATA STRUCTURES**

Course Code :CS302PC

COURSE CODE	COURSE OUTCOME	BT LEVEL
CS302PC.1	Develop a program using linear data structures such as array and circular queue	L3
CS302PC.2	Develop a program for basic operations of Stack and its applications	L3
CS302PC.3	Construct a program using Non-linear data structures and their applications such as trees and graphs	L3
CS302PC.4	Construct a program using linear data structures for Linked Lists	L3



**B.TECH I YEAR IISEM CSIT****COURSE NAME: COMPUTER ORIENTED STATISTICAL METHODS**

Course Code : MA303BS

Course Code	Course Outcome	BT Level
MA303BS.1	Apply the concepts of probability and distributions to some case studies. Apply the concepts of discrete probability distributions.	L3
MA303BS.2	Apply the concepts of continuous probability distributions.	L3
MA303BS.3	Assess the sampling theory and making inferences.	L5
MA303BS.4	Correlate the material of one unit to the material in other units.	L2
MA303BS.5	Resolve the potential misconceptions and hazards in each topic of study.	L1

**B.TECH I YEAR IISEM CSIT**

Name OF COURSE : Computer Organization and Microprocessor

Course Code : IT304PC

Course Outcome	Course Outcome	BT Level
IT304PC.1	Able to understand the basic components and the design of CPU, ALU and Control Unit.	L2
IT304PC.2	Ability to understand memory hierarchy and its impact on computer cost/performance	L3
IT304PC.3	Ability to understand the advantage of instruction level parallelism and pipelining for high performance Processor design.	L4
IT304PC.4	Ability to understand the instruction set, instruction formats and	L2



**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI - 505174.



	addressing modes of 8086	
IT304PC.5	Ability to write assembly language programs to solve problems.	L4

**B.TECH I YEAR IISEM CSIT**

Course Name : Object Oriented

Programming using C++

Course Code : CS305PC

Course Outcome	Course Outcome Statement	BT LEVEL
CS305PC.1	Identify the difference between structured program and procedure-oriented program	L1
CS305PC.2	Develop programs for file handling	L2
CS305PC.3	Implementing the concepts of Exceptions Handling in programming, Apply the concepts of inheritance	L3
CS305PC.4	Develop applications for a range of problems using object-oriented Programming techniques.	L2
CS305PC.5	Encapsulation of data in virtual functions.	L3



*Green*

**PRINCIPAL**  
**MOTHER THERESA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174



**B.TECH I YEAR IISEM CSIT****COURSE NAME: DATA STRUCTURES LAB**

Course Code : CS306ES

COURSE CODE	COURSE OUTCOME	BT LEVEL
CS306ES.1	Develop a program using linear data structures such as array and circular queue	L3
CS306ES.2	Develop a program for basic operations of Stack and its applications	L3
CS306ES.3	Construct a program using Non-linear data structures and their applications such as trees and graphs	L3
CS306ES.4	Construct a program using linear data structures for Linked Lists	L3
CS306ES.5	Ability to implement searching and sorting algorithms	L3

**B.TECH I YEAR IISEM CSIT****COURSE NAME: IT WORKSHOP AND MICROPROCESSOR LAB (IT308PC)**

Course Code : IT308PC

COURSE CODE	COURSE OUTCOME	BT LEVELS
IT308PC.1	Apply knowledge to assemble the computer	L4
IT308PC.2	Learn types software installations	L2
IT308PC.3	Ability to solve various troubles shooting.	L6
IT308PC.4	Make use of MS Office package.	L5





IT308PC.5	Design the documents and presentations by using MS Word and Power Point Presentation and Design the tabular and graphical representation of budget sheet etc using MS Excel.	L4
-----------	--	----

**B.TECH I YEAR I SEM CSIT****COURSE NAME: C++ PROGRAMMING LABS (CS309PC )**

Course Code : CS309PC

COURSE CODE	Course Outcome	BT LEVELS
CS309PC .1	Analyze the drawbacks of Procedure Oriented Programming comparing with the concepts of Object Oriented Programming paradigm & C++ language features in program design.	L4
CS309PC .2	Identify and analyze the role of Classes & Objects, constructors & destructors in program design.	L2
CS309PC .3	Design & implement various forms of inheritance and analyze how base class constructors are called.	L6
CS309PC .4	Evaluate operator overloading, runtime polymorphism and Generic Programming through examples.	L5
CS309PC .5	Explore exception handling and various Stream classes, I/O operations in handling file operations.	L4



*Y. Srinivas*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**SECOND YEAR SECOND SEMESTRE****B.TECH I YEAR IISEM CSIT****COURSE NAME: DISCRETE MATHEMATICS****Course Code: CS401PC**

CO. No.	COURSE OUTCOMES	BT Level
CS401PC.1	Ability to understand and construct precise mathematical proofs.	L1
CS401PC.2	Ability to use logic and set theory to formulate precise statements.	L5
CS401PC.3	Ability to analyze and solve counting problems on finite and discrete structures.	L4
CS401PC.4	Ability to describe and manipulate sequences.	L4
CS401PC.5	Ability to apply graph theory in solving computing problems.	L4

**B.TECH I YEAR IISEM CSIT****COURSE NAME: BUSINESS ECONOMICS & FINANCIAL ANALYSIS****Course Code : SM402MS**

Course Code	Course Outcomes	BT LEVEL
SM402MS.1	The students will understand the various Forms of Business and the impact of economic variables on the Business.	L2
SM402MS2.2	Understand the elasticity of the demand of the product, different types,	L2







	and measurement of elasticity of	
SM402MS.3	Recognize the Production function, features of Iso-Quants and Iso-Costs, Market Structure, Pricing aspects are learnt.	L1
SM402MS.4	The Students can study the firm's financial position by analyzing the Financial Statements of a Company.	L4
SM402MS.5	Evaluate different types of financial ratios knowing liquidity, solvency and profitability position of business.	L5

**B.TECH I YEAR IISEM CSIT****COURSE NAME: OPERATING SYSTEM – CS403PC**

Course Code : CS403PC

Sl. No	COURSEOUTCOMES	BT Level
CS403PC.1	Understand the concepts of OS ,the basic principles used in the design of modern operating system.	L2
CS403PC.2	Understand the concepts of threads and mechanisms for synchronization.	L2
CS403PC.3	Understand the concepts related to dead lock and memory management.	L2
CS403PC.4	Understand the concepts of virtual memory management, File system.	L2
CS403PC.5	Understand the concepts of secondary storage structure, protection and case study of Linux operating system.	L2



*Free*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH I YEAR IISEM CSIT

COURSE NAME: DATABASE MANAGEMENT SYSTEM-CS404PC

Course Code : CS404PC

Course Code	Course Outcomes	BT Levels
CS404PC .1	Understand data models to design a database	L2
CS404PC .2	Illustrate the conceptual design for Large enterprises	L2
CS404PC .3	Formulate SQL queries and integrity constraints over relations	L6
CS404PC .4	Apply normalization on database for eliminating redundancy	L3
CS404PC .5	Understand transaction properties, concurrency control and recovery techniques and Explain various data storage.	L2

COURSE NAME: JAVA PROGRAMMING – (CS405PC)

Course Code : CS405PC

SI. NO	COURSE OUTCOMES	Bloom Level
CS405PC.1	Able to solve real world problems using OOP techniques	L3
CS405PC.2	Able to understand the use of abstract classes.	L2
CS405PC.3	Able to solve problems using java collection framework and I/o classes	L3
CS405PC.4	Able to develop multithreaded applications with synchronization.	L5
CS405PC.5	Able to develop applets for web applications, Able to design GUI based applications	L5



**COURSE NAME: OPERATING SYSTEM LAB – CS406PC**

Course Code : CS406PC

COURSE CODE	COURSE OUTCOME	BT LEVEL
CS406PC.1	Implement the basic command of Sand will execute the various system calls.	L3
CS406PC.2	Implement the process synchronization problem using semaphore.	L3
CS406PC.3	Implement CPU scheduling algorithm for process scheduling and dead lock management techniques.	L3
CS406PC.4	Implement memory management techniques.	L3
CS406PC.5	Implement file storage allocation techniques.	L3

B.TECH I YEAR II SEM CSIT

**COURSE NAME: DATABANE MANAGEMENT SYSTEMS LAB**

Course Code : CS407PC

Courses	COURSE OUTCOME	BT Levels
CS407PC.1	Illustrate the basic DDL commands	L2
CS407PC.2	Illustrate DCL and DML commands.	L2
CS407PC.3	Demonstrate SQL queries using SQL operators.	L5
CS407PC.4	Explain the concept of relational algebra.	L1
CS407PC.5	Implement various queries using date and group functions and elaborate nested queries. Construct views, cursor.	L5







B.TECH II YEAR II SEM CSIT

COURSE NAME: JAVA PROGRAMMING LAB-CS408PC

Course Code : CS408PC

COURSE CODE	COURSE OUTCOME	BT Level
CS408PC.1	Able to write programs for solving real world problems using java collection frame work.	L2
CS408PC.2	Able to write programs using abstract classes.	L3
CS408PC.3	Develop Simple Java Programs using inheritance and ExceptionHandling.	L3
CS408PC.4	Develop Multi-threading Programming and Interfaces.	L6
CS408PC.5	Develop GUI applications using Applet classes, Swing components andEvent handling programs.	L6



*Green*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

**THIRD YEAR FIRST SEMESTRE**

B.TECH III YEAR II SEM CSIT

COURSE NAME: Formal Languages &amp; Automata Theory

Course Code : CS501PC

COURSE CODE	COURSE OUTCOME	BT Level
CS501PC.1	Able to understand the concept of abstract machines and their power to recognize the languages.	L2
CS501PC.2	Able to employ finite state machines for modeling and solving computing problems	L2
CS501PC 3	Able to design context free grammars for formal languages.	L2
CS501PC 4	Able to distinguish between decidability and undecidability.	L2

B.TECH III YEAR I SEM CSIT

COURSE NAME: SOFTWARE ENGINEERING

Course Code : CS502PC

COURSE CODE	COURSE OUTCOME	BT Level
CS502PC.1	Ability to translate end-user requirements into system and software requirements, using e.g. UML, and structure the requirements in a Software Requirements Document (SRD).	L2
CS502PC.2	Identify and apply appropriate software architectures and patterns to carry out high level design of a system and be able to critically compare alternative choices.	L2
CS502PC 3	Will have experience and/or awareness of testing problems and will be able to develop a simple testing report	L2





B.TECH III YEAR I SEM CSIT

**COURSE NAME: DATA COMMUNICATION AND COMPUTER NETWORKS**

Course Code : IT503PC

COURSE CODE	COURSE OUTCOME	BT Level
IT503PC.1	Ability to translate end-user requirements into system and software requirements, using e.g. UML, and structure the requirements in a Software Requirements Document (SRD).	L2
IT503PC.2	Identify and apply appropriate software architectures and patterns to carry out high level design of a system and be able to critically compare alternative choices.	L2
IT503PC.3	Will have experience and/or awareness of testing problems and will be able to develop a simple testing report.	L2

B.TECH III YEAR I SEM CSIT

**COURSE NAME: WEB PROGRAMMING**

Course Code : IT504PC

COURSE CODE	COURSE OUTCOME	BT Level
IT504PC.1	Design web pages.	L2
IT504PC.2	Use technologies of Web Programming..	L3
IT504PC.3	Build web-based application using sockets.	L3







B.TECH III YEAR I SEM CSIT

**COURSE NAME:** ADVANCED COMPUTER ARCHITECTURE

Course Code : CS512PE

COURSE CODE	COURSE OUTCOME	BT Level
CS512PE.1	Computational models and Computer Architectures.	L2
CS512PE.2	Concepts of parallel computer models.	L3
CS512PE.3	Scalable Architectures, Pipelining, Superscalar processors, multiprocessors	L2

B.TECH III YEAR I SEM CSIT

**COURSE NAME:** COMPUTER NETWORKS & WEB PROGRAMMING LAB

Course Code : IT506PC

COURSE CODE	COURSE OUTCOME	BT Level
IT506PC.:1	Implement data link layer framing methods	L4
IT506PC.:2	Analyze error detection and error correction codes	L4
IT506PC.:3	Implement Encoding and Decoding techniques used in presentation layer	L3



*Y...*  
**PRINCIPAL**  
**MOTHER THERESSA**  
 College of P.  
 ps

**THIRD YEAR SECOND SEMESTRE**

B.TECH III YEAR II SEM CSIT

**COURSE NAME: INTRODUCTION TO EMBEDDED SYSTEMS**

Course Code : IT601PC

COURSE CODE	COURSE OUTCOME	BT Level
IT601PC.1	Expected to understand the selection procedure of processors in the embedded domain	L2
IT601PC.2	Design procedure of embedded firm ware.	L3
IT601PC.3	Expected to evaluate the correlation between task synchronization and latency issues	L5

B.TECH III YEAR II SEM CSIT

**COURSE NAME: PRINCIPLES OF COMPILER CONSTRUCTION**

Course Code : IT602PC

COURSE CODE	COURSE OUTCOME	BT Level
IT602PC.1	Ability to design, develop, and implement a compiler for any language.	L2
IT602PC.2	Able to design and implement LL and LR parsers	L3



PRINCIPAL  
 MOTHER THERESSA  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.







B.TECH III YEAR II SEM CSIT

COURSE NAME: SCRIPTING LANGUAGES

Course Code : CS613PE

COURSE CODE	COURSE OUTCOME	BT Level
CS613PE.1	Comprehend the differences between typical scripting languages and typical system and application programming languages.	L2
CS613PE.2	Gain knowledge of the strengths and weakness of Perl, TCL and Ruby; and select an appropriate language for solving a given problem.	L2
IT604PC.3	Appraise the role of IoT protocols for efficient network communication.	L2

B.TECH III YEAR II SEM CSIT

COURSE NAME: COMPILER CONSTRUCTION LAB

Course Code : IT606PC

COURSE CODE	COURSE OUTCOME	BT Level
IT606PC.1	Design and develop interactive and dynamic web applications using HTML, CSS, JavaScript and XML	L3
IT606PC.2	Apply client-server principles to develop scalable and enterprise web applications..	L3
IT606PC 3	Ability to design, develop, and implement a compiler for any language.	L3



*Y...*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH III YEAR II SEM CSIT

COURSE NAME: NETWORK PROGRAMMING LAB

Course Code : CS622PE

COURSE CODE	COURSE OUTCOME	BT Level
CS622PE.1	To write socket API based programs	L4
CS622PE.2	To design and implement client-server applications using TCP and UDP sockets	L3
CS622PE.3	To analyze network programs	L4

B.TECH III YEAR II SEM CSIT

COURSE NAME : SCRIPTING LANGUAGES LAB

Course Code : CS623PE

COURSE CODE	COURSE OUTCOME	BT Level
CS623PE.1	Ability to understand the differences between Scripting languages and programming languages	L2
CS623PE.2	Able to gain some fluency programming in Ruby, Perl, TCL	L3




**DEPARTMENT OF CSE IN ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**
**Regulation: R18**
**FIRST YEAR FIRST SEMESTER**

B.TECH I YEAR I SEM CSE (AI &amp; ML) (R18)

Name of the Course: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vectors	L3
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L2
MA101BS.4	Solve the applications on the mean value theorems.	L3
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L2
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L2
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L3

B.TECH I YEAR I SEM EEE (R18)

 Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE103ES.1	Understand and analyze basic Electrical circuits	L2
EE103ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE103ES.3	Introduce components of Low Voltage Electrical Installations..	L2






**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A. I. C. T. E., New Delhi &amp; Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtcet.ac.in E-mail: mtcet.86@gmail.com Contact : +91 9848472523, +91 9842700545, +91 9889956556

**B.TECH I YEAR I SEMECE (R18)**

Name of the Course: Engineering Workshop

Course Code: ME105ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME105ES.1	Study and practice on machine tools and their operations	L2
ME105ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME105ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME105ES.4	Apply basic electrical engineering knowledge for house wiring practice.	L3

**B.TECH I YEAR I SEM CSE (AI & ML) (R18)**

Course Name: ENGLISH

Course Code: EN105HS

Course Outcome No	Course Outcome Statement	B.T Level
EN105HS.1	Use English Language effectively in spoken and written forms	
EN105HS.2	Comprehend the given texts and respond appropriately.	
EN105HS.3	Communicate confidently in various contexts and different cultures.	
EN105HS.4	Acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.	



PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



B.TECH I YEAR I SEM CSE (AI &amp; ML) (R18)

Name of the Course: **ENGINEERING CHEMISTRY LABORATORY** Course Code : CH106BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH106BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH106BS.2	Able to perform methods such as conductometry, potentiometric and pH merry in order to find out the concentrations or equivalence points of acids and bases	L2
CH106BS.3	Students are able to prepare polymers like bakelite and nylon-6.	L2
CH106BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3

B.TECH I YEAR I SEM CSE (AI &amp; ML) (R18)

Name of the Course: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN107HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN107HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN107HS.2	Neutralize their accent for intelligibility	L2
EN107HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3





B.TECH I YEAR I SEM CSE (AI &amp; ML) (R18)

 Name of the Course: **BASIC ELECTRICAL ENGINEERING**

Course Code: EE108ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE108ES.1	Understand and analyze basic Electrical circuits	L2
EE108ES.2	Study the working principles of Electrical Machines and Transformers	L1
EE108ES.3	Introduce components of Low Voltage Electrical Installations..	L2

### First Year Second Semester

B.TECH I YEAR II SEM CSE (AI &amp; ML) (R18)

Course Name: MATHEMATICS - II

Course Code: MA201BS

Course Outcome No	Course Outcome Statement	B.T Level
MA201BS.1	Identify whether the given differential equation of first order is exact or not	
MA201BS.2	Solve higher differential equation and apply the concept of differential equation to real world problems	
MA201BS.3	Evaluate the multiple integrals and apply the concept to find areas, volumes, centre of mass and Gravity for cubes, sphere and rectangular paralleloiped	
MA201BS.4	Evaluate the line, surface and volume integrals and converting them from one to another	



PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



**B.TECH I YEAR II SEM CSE (AI & ML) (R18)**

Course Name: APPLIED PHYSICS

Course Code: AP202BS

Course Outcome No	Course Outcome Statement	B.T Level
AP202BS.1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	
AP202BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	
AP202BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	
AP202BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials	

**B.TECH I YEAR II SEM CSE (AI & ML) (R18)**

Course Name: PROGRAMMING FOR PROBLEM SOLVING

Course Code: AP205BS

Course Outcome No	Course Outcome Statement	B.T Level
AP205BS.1	To write algorithms and to draw flowcharts for solving problems.	
AP205BS.2	To convert the algorithms/flowcharts to C programs	
AP205BS.3	To code and test a given logic in C programming language.	
AP205BS.4	To use arrays, pointers, strings and structures to write C programs	
AP205BS.5	Searching and sorting problems.	



*Green*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 85



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdr. & Dist.) - 505174, Telangana State.

Website : www.mtc88.ac.in E-mail: mtc88@gmail.com Contact : +91 9849472023, +91 9542700543, +91 9002055556.

B.TECH I YEAR II SEM CSE (AI & ML) (R18)

Course Name: ENGINEERING GRAPHICS

Course Code: ME204ES

Course Outcome No	Course Outcome Statement	B.T Level
ME204ES.1	Preparing working drawings to communicate the ideas and information.	
ME204ES.2	Read, understand and interpret engineering drawings.	

B.TECH I YEAR II SEM CSE (AI & ML) (R18)

Name of the Course: **APPLIED PHYSICS LABORATORY**

Course Code: AP205BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP205BS.1	Know the determination of the Planck's constant using Photo electric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
AP205BS.2	Appreciate quantum physics in semiconductor devices and optoelectronics.	L2
AP205BS.3	Gain the knowledge of applications of dielectric constant	L2
AP205BS.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
AP205BS.5	Carried out data analysis	L2



**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**


**B.TECH I YEAR II SEM CSE (AI & ML) (R18)**
**Course Name: PROGRAMMING FOR PROBLEM SOLVING LAB Course Code: CS106E**

Course Outcome No	Course Outcome Statement	B,T Level
CS106E.1	formulate the algorithms for simple problems	
CS106E.2	translate given algorithms to a working and correct program	
CS106E.3	correct syntax errors as reported by the compiler	
CS106E.4	identify and correct logical errors encountered during execution	
CS106E.5	represent and manipulate data with arrays, strings and structure	

**B.TECH I YEAR II SEM CSE (AI & ML) (R18)**
**Course Name: ENVIRONMENTAL SCIENCE Course Code: MC109ES**

Course Outcome No	Course Outcome Statement	B,T Level
MC109ES.1	Based on this course, the Engineering graduate will understand /evaluate / develop technologies on the basis of ecological principles and environmental regulations which in turn helps in sustainable development	







## Second Year First Semester

**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**

**COURSE NAME: DISCRETE MATHEMATICS**

**Course Code: CS310PC**

SNO	COURSE OUTCOMES	BT
CS310PC.1	Ability to understand and construct precise mathematical proofs.	L1
CS310PC.2	Ability to use logic and set theory to formulate precise statements.	L5
CS310PC.3	Ability to analyze and solve counting problems on finite and discrete structures.	L4
CS310PC.4	Ability to describe and manipulate sequences.	L4
CS310PC.5	Ability to apply graph theory in solving computing problems.	L4

**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**

**COURSE NAME: DATA STRUCTURES**

**Course Code: CS302PC**

CO. No.	COURSE OUTCOME	BT LEVEL
CS302PC.1	Develop a program using linear data structures such as array and circular queue	L3
CS302PC.2	Develop a program for basic operations of Stack and its applications	L3
CS302PC.3	Construct a program using Non-linear data structures and their applications such as trees and graphs	L3
CS302PC.4	Construct a program using linear data structures for Linked Lists	L3
CS302PC.5	Ability to Implement searching and sorting algorithms	L3




**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**
**COURSE NAME: MATHEMATICAL & STATISTICAL FOUNDATION**
**Course Code: MA313BS**

SNO	COURSE OUTCOMES	BT Level
MA313BS.1	Apply the number theory concepts to cryptography domain	L4
MA313BS.2	Apply the concepts of probability and distributions to some case studies	L4
MA313BS.3	Correlate the material of one unit to the material in other units.	L3
MA313BS.4	Resolve the potential misconceptions and hazards in each topic of study.	L3
MA313BS.5	Known about the logic families and realization of logic gates.	L1

**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**
**Course Name: Computer Organization & Architecture**
**Course Code: CS304PC**

SNO	COURSE OUTCOMES	BT Level
CS304PC.1	Understand the basics of instructions sets and their impact on processor design.	L5
CS304PC.2	Demonstrate an understanding of the design of the functional units of a digital computer system	L5
CS304PC.3	Evaluate cost performance and design trade-offs in designing and constructing a computer processor including memory	L2
CS304PC.4	Design a pipeline for consistent execution of instructions with minimum hazards	L1



**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**  
**COURSE NAME: PYTHON PROGRAMMING**

Course Code: CS311PC

Course Code	Course Outcomes	BT Level
CS311PC.1	Examine Python syntax and semantics and be fluent in the use of Python flow control and functions.	L2
CS311PC.2	Demonstrate proficiency in handling Strings and File Systems.	L2
CS311PC.3	Create, run and manipulate Python Programs using core data structures like Lists, Dictionaries and use Regular Expressions.	L4
CS311PC.4	Interpret the concepts of Object-Oriented Programming as used in Python.	L5
CS311PC.5	Implement exemplary applications related to Network programming, Web Services and Databases in Python.	L6

**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**  
**Course Name: BUSINESS ECONOMICS AND FINANCIAL ANALYSIS**  
**Course Code: SM306MS**

Course Code	Course Outcomes	Blooms Taxonomy Levels
SM306MS.1	The students will understand the various Forms of Business and the impact of economic variables on the Business.	L 2
SM306MS.2	Understand the elasticity of the demand of the product, different types, and measurement of elasticity of demand and factors influencing on elasticity of demand and supply	L2
SM306MS.3	Recognize the Production function, features of Iso-Quants and Iso-Costs, Market Structure, Pricing aspects are learnt.	L1
SM306MS.4	The Students can study the firm's financial position by analyzing the Financial Statements of a Company.	L4







B.TECH II YEAR I SEM CSE (AI &amp; ML) (R18)

Course Name: Data structures Lab

Course Code : CS307PC

CO. No	Course Outcome	BT levels
CS307PC.1	Implement linear and non linear data structures using linked list.	L1
CS307PC.2	Apply various data structures such as stack, queue and tree to solve the Problems	L4
CS307PC.3	Implement various searching and sorting techniques	L1
CS307PC.4	Analyze the complexity of the algorithms	3
CS307PC.5	Choose appropriate data structures while designing the applications	2

B.TECH II YEAR I SEM CSE (AI &amp; ML) (R18)

COURSE NAME : :PYTHON PROGRAMMING LAB

Course Code : CS312PC P

CO. No.	COURSE OUTCOME	BT Level
CS312PC P.1	Students will be able to describe the number, math functions, strings, list, tuples and dictionaries in python.	L1
CS312PC P.2	Students will be able to acquire the skills to apply different decision-making statements and functions in python.	L3
CS312PC P.3	Students will be able to interpret object-oriented programming in python.	L5
CS312PC P.4	Students will be able to develop skill to understand and summarize different file handling operations.	L6
CS312PC P.5	Students will be able to demonstrate the ability to design GUI applications in python and evaluate different database operations.	L3



Counselling Code : MTEC	Estd : 1999	JNTUH College Code : 86
 <b>MOTHER THERESSA COLLEGE OF ENGINEERING &amp; TECHNOLOGY</b> (Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad) P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Med. & Dist.) - 505174, Telangana State Website : www.mtc86.ac.in    E-mail: mtc86@gmail.com    Contact : +91 9849472023, +91 9542709549, +91 9859509506.		

**B.TECH II YEAR I SEM CSE (AI & ML) (R18)**

**Course Name: GENDER SENSITIZATION LAB**

**Course Code: MC309**

Course Outcome No	Course Outcome Statement	B.T Level
MC309.1	Students will have developed a better understanding of important issues related to gender in contemporary India	L2
MC309.2	Students will attain a finer grasp of how gender discrimination works in our society and how to counter it.	L2
MC309.3	Students will acquire insight into the gendered division of labor and its relation to politics and economics.	L2
MC309.4	Men and women students and professionals will be better equipped to work and live together as equals.	L2

**SECOND YEAR SECOND SEMETER**

**B.TECH II YEAR II SEM CSE (AI & ML) (R18)**

**Course Name: Formal Languages and Automata Theory**

**Course Code: CS416PC**

Course Code	Course Outcomes	BT Levels
CS416PC.1	Able to understand the concept of abstract machines and their power to recognize the languages.	L5
CS416PC.2	Able to employ finite state machines for modeling and solving computing problems.	L4
CS416PC.3	Able to design context free grammars for formal languages.	L1
CS416PC.4	Able to distinguish between decidability and undecidability.	L3
CS416PC.5	Able to gain proficiency with mathematical tools and formal methods.	L4





B.TECH II YEAR II SEM CSE (AI & ML) (R18)

Course Name : Software Engineering (CS417PC)

Course Code : CS417PC

Course Code	COURSE OUTCOMES	BT Level
CS417PC.1	Outline the framework activities for a given project.	L1
CS417PC.2	Examine Right process model for a given project.	L2
CS417PC.3	Analyze various system models for a given Context	L3
CS417PC.4	Understand various testing techniques for a given project.	L5
CS417PC.5	Identify various risks in project development.	L5

B.TECH II YEAR II SEM CSE (AI & ML) (R18)

COURSE NAME :OPERATING SYSTEM

Course Code: CS403PC

CO. No.	COURSE OUTCOMES	BT Level
CS403PC.1	Understand the concepts of OS, the basic principles used in the design of modern operating system and process.	L2
CS403PC.2	Understand the concepts of threads and mechanisms for synchronization.	L2
CS403PC.3	Understand the concepts related to deadlock and memory management.	L2
CS403PC.4	Understand the concepts of virtual memory management, file system.	L2
CS403PC.5	Understand the concepts of secondary storage structure, protection and case study of Linux operating system.	L2





Counselling Code : MTEC      Estd : 1999      JNTUH College Code : 88



**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**  
 (Approved by A. I. C. T. E., New Delhi & Affiliated to J. N. T. U Hyderabad)  
 P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.  
 Website : www.mtec06.pc.in    E-mail: mtec.88@gmail.com    Contact : +91 9849472523, +91 9542795545, +91 9809300558.

B.TECH II YEAR II SEM CSE (AI & ML) (R18)

COURSE NAME : DATABASE MANAGEMENT SYSTEM

Course Code : CS404PC

Course Code	Course Outcomes	BT Levels
CS404PC .1	Understand data models to design a database	L2
CS404PC .2	Illustrate the conceptual design for Large enterprises	L2
CS404PC .3	Formulate SQL queries and integrity constraints over relations	L6
CS404PC .4	Apply normalization on database for eliminating redundancy	L3
CS404PC .5	Understand transaction properties, concurrency control and recovery techniques and Explain various data storage and security mechanisms	L2

B.TECH II YEAR II SEM CSE (AI & ML) (R18)

COURSE NAME : JAVA PROGRAMMING

Course Code : CS412PC

CO. NO	COURSE OUTCOMES	BT Level
CS412PC.1	Able to solve real world problems using OOP techniques	L3
CS412PC.2	Able to understand the use of abstract classes.	L2
CS412PC.3	Able to solve problems using java collection framework and I/o classes	L3
CS412PC.4	Able to develop multithreaded applications with synchronization.	L5
CS412PC.5	Able to develop applets for web applications, Able to design GUI based applications	L5





B.TECH II YEAR II SEM CSE (AI &amp; ML) (R18)

COURSE NAME : OPERATING SYSTEM LAB

Course Code : CS406PC

CO. NO	COURSE OUTCOMES	BT Level
CS406PC.1	Implement the basic command of OS and will execute the various system calls.	L3
CS406PC.2	Implement the process synchronization problem using semaphore	L2
CS406PC.3	Implement CPU scheduling algorithm for process scheduling and deadlock management	L3
CS406PC.4	Implement memory management techniques.	L5
CS406PC.5	Implement file storage allocation techniques.	L5

B.TECH II YEAR II SEM CSE (AI &amp; ML) (R18)

COURSE NAME : DATABASE MANAGEMENT SYSTEMS LAB-CS407PC

Course Code: CS407PC

CO. No.	COURSE OUTCOME	BT Levels
CS407PC .1	Illustrate the basic DDL commands	L2
CS407PC .2	Illustrate DCL and DML commands.	L2
CS407PC .3	Demonstrate SQL queries using SQL operators.	L5
CS407PC .4	Explain the concept of relational algebra.	L1
CS407PC .5	Implement various queries using date and group functions and elaborate nested queries. Construct views, cursor and triggers.	L5



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Md. & Dist.) - 505174, Telangana State.

Website : www.mtcet.ac.in E-mail: mtcet.86@gmail.com Contact: +91 9849472523, +91 9842700545, +91 9989559556.

B.TECH II YEAR II SEM CSE (AI & ML) (R18)

COURSE NAME: JAVA PROGRAMMING LAB

Course Code: CS408PC

CO. No.	COURSE OUTCOME	BT Level
CS408PC.1	Able to write programs for solving real world problems using java collection frame work.	L2
CS408PC.2	Able to write programs using abstract classes.	L3
CS408PC.3	Develop Simple Java Programs using inheritance and Exception Handling.	L3
CS408PC.4	Develop Multi-threading Programming and Interfaces.	L6
CS408PC.5	Develop GUI applications using Applet classes, Swing components and Event handling programs.	L6



*Yeesa*  
PRINCIPAL  
MOTHER THERESSA  
College of Engineering & Technology  
PEDDAPALLI-505 174.



**DEPARTMENT OF MEANICAL ENGINEERING****Regulation –R18****FIRST YEAR FIRST SEMESTER**

B.TECH | YEAR | SEM ME

Name of the Course: MATHEMATICS – I

Course Code: MA101BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA101BS.1	Write the matrix representation of a set of linear equations and to analyses the solution of the system of equations	L2
MA101BS.2	Find the Eigenvalues and Eigen vMEtors	L3
MA101BS.3	Reduce the quadratic form to canonical form using orthogonal transformations.	L2
MA101BS.4	Solve the applications on the mean value theorems.	L3
MA101BS.5	Evaluate the improper integrals using Beta and Gamma functions	L2
MA101BS.6	Find the extreme values of functions of two variables with/ without constraints.	L2
MA101BS.7	Evaluate the multiple integrals and apply the concept to find areas, volumes	L3





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9848472523, +91 9542709545, +91 9989919558

### B.TECH | YEAR | SEM ME

Name of the Course: **BASIC ELMETRICAL ENGINEERING**

Course Code: EE103ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE103ES.1	Understand and analyze basic EIMETRICAL circuits	L2
EE103ES.2	Study the working principles of EIMETRICAL Machines and Transformers	L1
EE103ES.3	Introduce components of Low Voltage EIMETRICAL Installations,.	L2

### B.TECH | YEAR | SEM ME

Name of the Course: Engineering Workshop

Course Code: ME105ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME105ES.1	Study and practice on machine tools and their operations	L2
ME105ES.2	Practice on manufacturing of components using workshop trades including plumbing, fitting, carpentry, and foundry, house wiring and welding.	L2
ME105ES.3	Identify and apply suitable tools for different trades of Engineering processes including drilling, material removing, measuring, chiseling	L3
ME105ES.4	Apply basic eIMETRICAL engineering knowledge for house wiring practice.	L3




**MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9049472523, +91 8542708545, +91 9989959556.

**B.TECH | YEAR | SEM ME**

Course Name: ENGLISH

Course Code: EN105HS

Course Outcome No	Course Outcome Statement	B.T Level
EN105HS.1	Use English Language effectively in spoken and written forms	L3
EN105HS.2	Comprehend the given texts and respond appropriately.	L2
EN105HS.3	Communicate confidently in various contexts and different cultures.	L2
EN105HS.4	Acquire basic proficiency in English including reading and listening comprehension, writing and speaking skills.	L2

**B.TECH | YEAR | SEM ME**

 Name of the Course: **ENGINEERING CHEMISTRY LABORATORY** Course Code : CH106BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
CH106BS.1	Determination of parameters like hardness of water and rate of corrosion of mild steel in various conditions	L2
CH106BS.2	Able to perform methods such as conductometry, potentiometric and pH meter in order to find out the concentrations or equivalence points of acids and bases	L2
CH106BS.3	Students are able to prepare polymers like bakelite and nylon-6.	L2
CH106BS.4	Estimations saponification value, surface tension and viscosity of lubricant oils	L3





Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



# MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989990556.

B.TECH | YEAR I SEM ME

Name of the Course: **ENGLISH LANGUAGE AND COMMUNICATION SKILLS LABORATORY**

Course Code: EN107HS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN107HS.1	Understand the nuances of English language through audio-visual experience and group activities	L2
EN107HS.2	Neutralize their accent for intelligibility	L2
EN107HS.3	Speak with clarity and confidence which in turn enhances their employability skills	L3

B.TECH | YEAR I SEM ME

Name of the Course: **BASIC ELECTRIC ENGINEERING**

Course Code: EE108ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE108ES.1	Understand and analyze basic EIMETrical circuits	L2
EE108ES.2	Study the working principles of EIMETrical Machines and Transformers	L1
EE108ES.3	Introduce components of Low Voltage EIMETrical Installations..	L2



*Principals*  
**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



# MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9949472523, +91 9942709545, +91 9999950594.

## FIRST YEAR SECOND SEMESTER

B.TECH I YEAR II SEM ME

Course Name: MATHEMATICS - II

Course Code: MA201BS

Course Outcome No	Course Outcome Statement	B.T Level
MA201BS.1	Identify whether the given differential equation of first order is exact or not	L2
MA201BS.2	Solve higher differential equation and apply the concept of differential equation to real world problems	L3
MA201BS.3	Evaluate the multiple integrals and apply the concept to find areas, volumes, centre of mass and Gravity for cubes, sphere and rectangular parallelopiped	L4
MA201BS.4	Evaluate the line, surface and volume integrals and converting them from one to another	L5

B.TECH I YEAR II SEM ME

Course Name: APPLIED PHYSICS

Course Code: AP202BS

Course Outcome No	Course Outcome Statement	B.T Level
AP202BS.1	The student would be able to learn the fundamental concepts on Quantum behaviour of matter in its micro state	L2
AP202BS.2	The knowledge of fundamentals of Semiconductor physics, Optoelectronics, Lasers and fibre optics enable the students to apply to various systems like communications, solar cell, photo cells and so on.	L3
AP202BS.3	Design, characterization and study of properties of material help the students to prepare new materials for various engineering applications	L3
AP202BS.4	The course also helps the students to be exposed to the phenomena of electromagnetism and also to have exposure on magnetic materials and dielectric materials	L2



*Greeny*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.

Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989950556.

### B.TECH I YEAR II SEM ME

Course Name: PROGRAMMING FOR PROBLEM SOLVING

Course Code: AP205BS

Course Outcome No	Course Outcome Statement	B.T Level
AP205BS.1	To write algorithms and to draw flowcharts for solving problems.	L3
AP205BS.2	To convert the algorithms/flowcharts to C programs	L4
AP205BS.3	To code and test a given logic in C programming language.	L5
AP205BS.4	To use arrays, pointers, strings and structures to write C programs	L2
AP205BS.5	Searching and sorting problems.	L3

### B.TECH I YEAR II SEM ME

Course Name: ENGINEERING GRAPHICS

Course Code: ME204ES

Course Outcome No	Course Outcome Statement	B.T Level
ME204ES.1	Preparing working drawings to communicate the ideas and information.	L2
ME204ES.2	Read, understand and interpret engineering drawings.	L2



*Y. Suresh*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542799545, +91 9889059556.

B.TECH | YEAR II SEM ME

Name of the Course: **APPLIED PHYSICS LABORATORY**

Course Code: AP205BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP205BS.1	Know the determination of the Planck's constant using Photo electric effect and identify the material whether it is n-type or p-type by Hall experiment.	L2
AP205BS.2	Appropriate quantum physics in semiconductor devices and optoelectronics.	L2
AP205BS.3	Gain the knowledge of applications of dielectric constant	L2
AP205BS.4	Understand the variation of magnetic field and behavior of hysteresis curve.	L2
AP205BS.5	Carried out data analysis	L2



*Green*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174;


**MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkurru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9899959556.

**B.TECH I YEAR II SEM ME**

Course Name: PROGRAMMING FOR PROBLEM SOLVING LAB Course Code: CS106E

Course Outcome No	Course Outcome Statement	B.T Level
CS106E.1	formulate the algorithms for simple problems	L3
CS106E.2	translate given algorithms to a working and corrMEt program	L3
CS106E.3	corrMEt syntax errors as reported by the compiler	L2
CS106E.4	identify and corrMEt logical errors encountered during exMEution	L4
CS106E.5	represent and manipulate data with arrays, strings and structure	L3

**B.TECH I YEAR II SEM ME**

Course Name: ENVIRONMENTAL SCIENCE Course Code: MC109ES

Course Outcome No	Course Outcome Statement	B.T Level
MC109ES.1	Based on this course, the Engineering graduate will understand /evaluate / develop tMEhnologies on the basis of MEological principles and environmental regulations which in turn helps in sustainable development	L2





## SECOND YEAR FIRST SEMESTER

B.TECH II YEAR I SEM ME

Name of the Course: Probability and Statistics &amp; Complex Variables Course Code: MA301BS

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA301BS.1	Formulate and solve problems involving random variables and apply statistical methods for analysing experimental data.	L2
MA301BS.2	Analyse the complex function with reference to their analyticity, integration using Cauchy's integral and residue theorems	L4
MA301BS.3	Taylor's series expansions of complex function	L2
MA301BS.4	Laurent's series expansions of complex function	L2

B.TECH II YEAR I SEM ME

Name of the Course: MEanics of Solids

Course Code: ME302PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
MA302BS.1	Analyze the behavior of the solid bodies subjected to various types of loading	L2
MA302BS.2	Apply knowledge of materials and structural elements to the analysis of simple structures	L4
MA302BS.3	Undertake problem identification, formulation and solution using a range of analytical methods	L2
MA302BS.4	ExpMEtation and capacity to undertake lifelong learning	L2







## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9889959556.

### B.TECH II YEAR I SEM ME

Name of the Course: Material Science and Metallurgy

Course Code: ME303PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME303PC.1	Apply knowledge of materials and structural elements to the analysis of simple structures	L2
ME303PC.2	Analyze the behavior of the solid bodies	L4
ME303PC.3	ExpMEtation and capacity to undertake lifelong learning	L2
ME303PC.4	Understand the idea for selMEting materials	L2

### B.TECH II YEAR I SEM ME

Name of the Course: Production TMEhnology

Course Code: ME304PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME303PC.1	Understand the idea for selMEting materials for patterns	L2
ME303PC.2	Design core, core print and gating system in metal casting processes	L4
ME303PC.3	Develop process-maps for metal forming processes using plasticity principles	L2
ME303PC.4	Understand the arc, gas, solid state and resistance welding processes	L2





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989999556.

### B.TECH II YEAR I SEM ME

Name of the Course: Thermodynamics

Course Code: ME305PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME305PC.1	Apply the laws of Thermodynamics	L2
ME305PC.2	the student should be able to KNOW THE PROPERTIES OF SYSTEM	L4
ME305PC.3	TO know the basics	L2
ME305PC.4	To know the cycle	L2

### B.TECH II YEAR I SEM ME

Name of the Course: Production Technology Lab

Course Code: ME306PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME306PC.1	Understanding the properties of moulding sands	L2
ME306PC.2	Fabricate joints using gas welding and arc welding	L4
ME306PC.3	Understanding the method of pattern making	L2
ME306PC.4	Basic idea of press working tools and performs moulding studies on plastics.	L2



*Y. Praveen Kumar*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Md. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9848472523, +91 9542709545, +91 9989950556.

### B.TECH II YEAR I SEM ME

Name of the Course: Machine Drawing Practice

Course Code: ME307PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME307PC.1	Preparation of engineering and working drawings with dimensions and bill of material during design and development. Developing assembly drawings using part drawings of machine components	L2
ME307PC.2	Conventional representation of materials, common machine elements and parts such as screws, nuts, bolts, keys, gears, webs, ribs	L4
ME307PC .3	Methods of dimensioning, general rules for sizes and placement of dimensions for holes, centers, curved and tapered features	L2
ME307PC..4	Title boxes, their size, location and details - common abbreviations and their liberal usage	L2

### B.TECH II YEAR I SEM ME

Name of the Course: Material Science and MEanics of Solids Lab

Course Code: ME308PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME308PC.1	Analyze the behavior of the solid bodies subMEted to various types of loading	L2
ME308PC.2	Apply knowledge of materials and structural elements to the analysis of simple structures	L4
ME308PC.3	Undertake problem identification, formulation and solution using a range of analytical methods	L2
ME308PC.4	ExpMEtation and capacity to undertake lifelong learning	L2







## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472623, +91 9542709545, +91 9989959556.

### B.TECH II YEAR I SEM ME

Name of the Course: Constitution of India

Course Code \*MC309

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC309.1	The Constitution of India is not only a legal document but it also reflects social, political and economic perspectives of the Indian Society.	L2
*MC309.2	The judicial activism of the Supreme Court of India and its historic contributions has been recognized throughout the world	L4
*MC309.3	Salient features and characteristics of the Constitution of India	L2
*MC309.4	. Emergency Provisions: National Emergency, President Rule, Financial Emergency	L2

## SECOND YEAR SECOND SEMESTER

### B.TECH II YEAR II SEM ME

Name of the Course: Basic Electrical and Electronics Engineering

Course Code EE401ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE401ES.1	To analyze and solve electrical circuits using network laws and theorems	L2
EE401ES.2	To introduce components of Low Voltage Electrical Installations	L4
EE401ES.3	To understand and analyze basic electrical and magnetic circuits	L2
EE401ES.4	To identify and characterize diodes and various types of transistors	L2





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556

### B.TECH II YEAR II SEM ME

Name of the Course: Kinematics of Machinery Course

Code ME402PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME402PC.1	The main purpose is to give an idea about the relative motions obtained in all the above type of components used in MEanical Engineering	L2
ME402PC.2	To know the Straight-line motion MEanisms:	L4
ME402PC.3	Analysis of motion of followers	L2
ME402PC.4	To know about the Gear Trains	L2

### B.TECH II YEAR II SEM ME

Name of the Course: Thermal Engineering - I

Course Code ME403PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME403PC.1	At the end of the course, the student should be able to evaluate the performance of IC engines under the given operating conditions	L2
ME403PC.2	At the end of the course, the student should be able to evaluate the performance of compressor under the given operating conditions	L4
ME403PC.3	Apply the laws of Thermodynamics to evaluate the performance of Refrigeration and air-conditioning cycles	L2
ME403PC.4	Understand the functionality of the major components of the IC Engines and effMEts of operating conditions on their performance	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 88



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec88.ac.in E-mail: mtec88@gmail.com Contact : +91 9846472523, +91 9542799545, +91 9889959556.

B.TECH II YEAR II SEM ME

Name of the Course: Fluid MEanics and Hydraulic Machines

Course Code ME404PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME404PC.1	Able to identify type of fluid flow patterns and describe continuity equation.	L2
ME404PC.2	To selMEt and analyze an appropriate turbine with reference to given situation in power plants	L4
ME404PC.3	To estimate performance parameters of a given Centrifugal and RMEiproccating pump.	L2
ME404PC.4	Able to demonstrate boundary layer concepts	L2

B.TECH II YEAR II SEM ME

Name of the Course: Instrumentation and Control Systems

Course Code ME405PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME405PC.1	To identify various elements and their purpose in typical instruments, to identify various errors that would occur in instruments	L2
ME405PC.2	Analysis of errors so as to determine corrMEtion factors for each instrument	L4
ME405PC.3	To understand static and dynamic characteristics of instrument and should be able to determine loading response time.	L2
ME405PC.4	For given range of displacement should be able to spMEify transducer, it accurate and loading time of that transducer	L2



*Y. Sreenivas*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472323, +91 9542709545, +91 9989995556.

### B.TECH II YEAR II SEM ME

Name of the Course: Basic EIMETrical and EIMEtronic Engineering Lab

Course Code EE409ES

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EE409ES.1	To analyze and solve eIMETrical circuits using network laws and theorems	L2
EE409ES.2	To study the working principles of EIMETrical Machines	L4
EE409ES.3	To introduce components of Low Voltage EIMETrical Installations	L2
EE409ES.4	To identify and characterize diodes and various types of transistors	L2

### B.TECH II YEAR II SEM ME

Name of the Course: Fluid MEanics and Hydraulic Machines Lab

Course Code : ME407PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME407PC.1	Able to explain the effMEt of fluid properties on a flow system	L2
ME407PC.2	Able to identify type of fluid flow patterns and describe continuity equation	L4
ME407PC.3	To analyze a variety of practical fluid flow and measuring devices and utilize fluid MEanics principles in design	L2
ME407PC.4	To selMEt and analyze an appropriate turbine with reference to given situation in power plants	L2



*Y. Suresh*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Midi. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9848472523, +91 9542709545, +91 9989959556.

### B.TECH II YEAR II SEM ME

Name of the Course: Instrumentation and Control Systems Lab

Course Code ME408PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME408PC.1	the student will be able to Characterize and calibrate measuring devices	L2
ME408PC.2	Identify and analyze errors in measurement.	L4
ME408PC.3	Analyze measured data using regression analysis	L2
ME408PC.4	Calibration of Pressure Gauges, temperature, LVDT, capacitive transducer, rotameter.	L2

### B.TECH II YEAR II SEM ME

Name of the Course: Gender Sensitization Lab

Course Code \*MC409

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC409.1	To develop students' sensibility with regard to issues of gender in contemporary India	L2
*MC409.2	To introduce students to information about some key biological aspMEts of genders	L4
*MC409.3	To help students refIMEt critically on gender violence.	L2
*MC409.4	To expose students to more egalitarian interactions between men and women.	L2



*Yeele*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9848472523, +91 9542709545, +91 9999959556.

### THIRD YEAR FIRST SEMESTRE

B.TECH III YEAR I SEM ME

Name of the Course Dynamics of Machinery

Course Code ME501PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME501PC.1	To know about governors	L2
ME501PC.2	To understand the general design procedures	L4
ME501PC.3	in all the above type of components used in MEanical Engineering	L2
ME501PC.4	T understand the balancing of masses	L2

B.TECH III YEAR I SEM ME

Name of the Course Design of Machine Members-I

Course Code ME502PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME502PC.1	To understand the general design procedures and principles in the design of machine elements	L2
ME502PC.2	To study different materials of construction and their properties and factors determining the selection of material for various applications.	L4
ME502PC.3	To determine stresses under different loading conditions.	L2
ME502PC.4	To learn the design procedure of different fasteners, joints, shafts and couplings.	L2






**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**

(Approved by A.I.C.T.E, New Delhi &amp; Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec55.ac.in E-mail: mtec.88@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9899950556.

**B.TECH III YEAR I SEM ME**

Name of the Course Metrology &amp; Machine Tools

Course Code ME503PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME503PC.1	Identify techniques to minimize the errors in measurement	L2
ME503PC.2	Identify methods and devices for measurement of length, angle, gear & thread parameters, surface roughness and geometric features of parts	L4
ME503PC.3	Understand working of lathe, shaper, planer, drilling, milling and grinding machines	L2
ME503PC.4	Comprehend speed and feed mechanisms of machine tools.	L2

**B.TECH III YEAR I SEM ME**

Name of the Course Business Economics &amp; Financial Analysis

Course Code ME504PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME504PC.1	the various Forms of Business and the impact of Economic variables on the Business.	L2
ME504PC.2	The Demand, Supply, Production, Cost, Market Structure, Pricing aspects are learnt	L4
ME504PC.3	The Students can study the firm's financial position	L2
ME504PC.4	By analysing the Financial Statements of a Company	L2




**MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556

**B.TECH III YEAR I SEM ME**

Name of the Course Thermal Engineering-II

Course Code ME505PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME505PC.1	Develop state – space diagrams based on the schematic diagrams of process flow of steam and gas turbine plants	L2
ME505PC.2	Apply the laws of Thermodynamics to analyze thermodynamic cycles	L4
ME505PC.3	Differentiate between vapour power cycles and gas power cycles	L2
ME505PC.4	Infer from property charts and tables and to apply the data for the evaluation of performance parameters of the steam and gas turbine plants	L2

**B.TECH III YEAR I SEM ME**

Name of the Course Operations Research

Course Code ME506PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME506PC.1	Infer from property charts and tables	L2
ME506PC.2	Formulation of optimization model	L4
ME506PC.3	Formulation of applying appropriate optimization technique	L2
ME506PC.4	To apply the data for the evaluation of performance parameters of the steam and gas turbine plants	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 86



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in Email: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9899559556

B.TECH III YEAR I SEM ME

Name of the Course Thermal Engineering Lab

Course Code ME507PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME507PC.1	To understand the working principles of IC Engines,	L2
ME507PC.2	Study of Boilers	L4
ME507PC.3	To understand the working principles of IC Engines Compressors	L2
ME507PC.4	Dis-assembly / Assembly of IC Engines	L2

B.TECH III YEAR I SEM ME

Name of the Course Metrology & Machine Tools Lab

Course Code ME508PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME508PC.1	To impart practical exposure to the metrology equipment	L2
ME508PC.2	To conduct experiments	L4
ME508PC.3	understand the working of the experiments	L2
ME508PC.4	To impart practical exposure to the Machine tools	L2



*Y. Sreenivas*  
**PRINCIPAL**  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabankuru (VIII), PEDDAPALLI (Mdi. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

**B.TECH III YEAR I SEM ME**

Name of the Course Kinematics &amp; Dynamics Lab

Course Code ME509PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME509PC.1	Understand types of motion	L2
ME509PC.2	Analyze forces and torques of components in linkages	L4
ME509PC.3	Understand static and dynamic balance	L2
ME509PC.4	Understand forward and inverse kinematics of open-loop MEanisms	L2

**B.TECH III YEAR I SEM ME**

Name of the Course : IntellMEtual Property Rights

Course Code \*MC510

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC510.1	Understand the Trade SMErets	L2
*MC510.2	Understand Law of copy rights	L4
*MC510.3	Understand New development of intelliMEtual property	L2
*MC510.4	Understand Trade Marks	L2



**PRINCIPAL**  
**MOTHER THERESSA**  
**College of Engineering & Technology**  
**PEDDAPALLI-505 174.**


**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdi. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9986955556.

**THIRD YEAR SECOND SEMESTER**

B.TECH III YEAR II SEM ME

Name of the Course Design of Machine Members-II

Course Code ME601PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME601PC.1	Knowledge about journal bearing design using different empirical relations	L2
ME601PC.2	Estimation of life of rolling element bearings and their selection for given service conditions	L4
ME601PC.3	Acquaintance with design of the components as per the standard, recommended procedures which is essential in development of machinery in industry	L2
ME601PC.4	Acquaintance with design of the components as per the standard, recommended procedures which is essential in design	L2

B.TECH III YEAR II SEM ME

Name of the Course Heat Transfer

Course Code ME602PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME602PC.1	Understand the basic modes of heat transfer	L2
ME602PC.2	Understand and analyze heat transfer through extended surfaces	L4
ME602PC.3	Understand concepts of continuity, momentum and energy equations	L2
ME602PC.4	Understand the principles of boiling, condensation and radiation heat transfer	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Md. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

B.TECH III YEAR II SEM ME

Name of the Course CAD &amp; CAM

Course Code ME603PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME603PC.1	Understand geometric transformation techniques in CAD	L2
ME603PC.2	Develop mathematical models to represent curves and surfaces.	L4
ME603PC.3	Model engineering components using solid modeling techniques.	L2
ME603PC.4	Develop programs for CNC to manufacture industrial components	L2

B.TECH III YEAR II SEM ME

 Name of the Course **PRODUCTION PLANNING AND CONTROL**

Course Code : ME604PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME604PC.1	Evaluate MRP and JIT systems against traditional inventory control systems.	L2
ME604PC.2	Understand basics of variability and its role in the performance of a production system	L4
ME604PC.3	Analyze aggregate planning strategies.	L2
ME604PC.4	Apply forecasting and scheduling techniques to production systems.	L2



PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472525, +91 9542709545, +91 9989950556.

**B.TECH III YEAR II SEM ME**

Name of the Course Non-Conventional Energy Sources

Course Code : ME8000E

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME8000E.1	Understand the principles of wind power and solar photovoltaic power generation, fuel cells	L2
ME8000E.2	Design suitable power controller for wind and solar applications	L4
ME8000E.3	Assess the cost of generation for conventional and renewable energy plants	L2
ME8000E.4	Analyze the issues involved in the integration of renewable energy sources to the grid	L2

**B.TECH III YEAR II SEM ME**

Name of the Course : Finite Element Methods

Course Code: ME604PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME604PC.1	Apply finite element method to solve problems in solid MEanics, fluid MEanics and heat transfer	L2
ME604PC.2	Formulate and solve problems in one dimensional structures including trusses, beams and frames	L4
ME604PC.3	Formulate and solve problems in one dimensional structures including trusses, beams and frames	L2
ME604PC.4	ANSYS, ABAQUS, NASTRAN	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9899959356.

**B.TECH III YEAR II SEM ME**

Name of the Course: Heat Transfer Lab

Course Code ME605PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME605PC.1	Perform transient heat conduction experiment	L2
ME605PC.2	Obtain variation of temperature along the length of the pin fin under forced and free convection	L4
ME605PC.3	Perform radiation experiments: Determine surface emissivity of a test plate and Stefan-Boltzmann's constant and compare with theoretical value	L2
ME605PC.4	Perform steady state conduction experiments to estimate thermal conductivity of different materials	L2

**B.TECH III YEAR II SEM ME**

Name of the Course CAD &amp; CAM Lab

Course Code ME606PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME606PC.1	To understand the analysis of various aspmets in of manufacturing design	L2
ME606PC.2	Estimation of natural frequencies and mode shapes, Harmonic response of 2D beam.	L4
ME606PC.3	Study of various standard Translators. Design of simple components.	L2
ME606PC.4	Representation of dimensioning and tolerances.	L2





## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec88.ac.in E-mail: mtes.88@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

B.TECH III YEAR II SEM ME

Name of the Course Advanced Communication Skills lab

Course Code: EN608PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
EN608HS.1	Acquire vocabulary and use it to communicate to others.	L2
EN608HS.2	Understand and enhance their proficiency in Reading.	L2
EN608HS.3	Apply relevant formats of writing paragraph, e-mail and letter writing ,resume and report writing.	L2
EN608HS.4	Plan their ideas to give oral presentations like seminars, ppt.	L2

B.TECH III YEAR II SEM ME

Name of the Course Environmental Science

Course Code : \*MC609

Course Outcome NO	Course Outcome Statement	B.T LEVEL
*MC609.1	Based on this course, the Engineering graduate will understand /evaluate / develop tMEhnologies	L2
*MC609.2	environmental regulations which in turn helps in sustainable development	L4
*MC609.3	Natural Resources: Classification of Resources	L2
*MC609.4	Environmental Policy, Legislation & EIA	L2



*Y. Suresh*  
PRINCIPAL  
MOTHER THERESSA  
College of Engineering & Technology  
PEDDAPALLI-505 174.





## Fourth year First Semester

B.TECH IV YEAR I SEM ME

Name of the Course Refrigeration &amp; Air Conditioning

Course Code ME701PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME701P.1	At the end of the course, the student should be able to Differentiate between different types of refrigeration systems	L2
ME701P.2	Thermodynamically analyse refrigeration and air conditioning systems	L4
ME701P.3	Apply the principles of Psychometrics to design the air conditioning loads for the industrial applications.	L2
ME701P.4	evaluate performance parameters of psychrometric properties	L2

B.TECH IV YEAR I SEM ME

Name of the Course Automation in Manufacturing

Course Code ME712PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME712PE.1	Understanding the importance of MEological balance for sustainable development	L2
ME712PE.2	Understanding the impacts of developmental activities and mitigation measures	L4
ME712PE.3	Understanding the environmental policies and regulations	L2
ME712PE.4	Understanding Automated material handling	L2



MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.



## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E., New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkuru (VIII), PEDDAPALLI (Mdi. & Dist.) - 505174, TeLANGANA State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472923, +91 9542709545, +91 9989559556.

### B.TECH IV YEAR I SEM ME

Name of the Course Power Plant Engineering

Course Code ME721PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME721PE.1	Understand working of boilers including water tube, fire tube and high pressure boilers and determine efficiencies	L2
ME721PE.2	Evaluate the performance of condensers and steam turbines	L4
ME721PE.3	Evaluate the performance of gas turbines	L2
ME721PE.4	Understand the concept of Rankine cycle	L2

### B.TECH IV YEAR I SEM ME

Name of the Course : Fluid Power Systems

Course Code ME733PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME733PE.1	Understand the Properties of fluids, Fluids for hydraulic systems,	L2
ME733PE.2	governing laws. distribution of fluid power, Design and analysis of typical hydraulic circuits.	L4
ME733PE.3	maintenance of system.	L2
ME733PE.4	• Know accessories used in fluid power system, Filtration systems	L2





## MOTHER THERESA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mch. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

### B.TECH IV YEAR I SEM ME

Name of the Course Principles of Entrepreneurship

Course Code : ME6000E

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME6000E.1	Idea of Production and marketing management:	L2
ME6000E.2	To know the Industrial Financial Support:	L4
ME6000E.3	Understanding the Labour legislation, salient provision of health	L2
ME6000E.4	To know the Financing and Managing the new ventures	L2

### B.TECH IV YEAR I SEM ME

Name of the Course Industrial Oriented Mini ProjME/ Summer Internship

Course Code ME702PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME702PC.1	Summarize the fundamental concepts and techniques used in mini projME.	L2
ME702PC.2	Develop skill to build design techniques for various problem analyses.	L4
ME702PC.3	Build knowledge through practical assignments and learn the various design methods for solving problems	L2
ME702PC.4	Design identifies basic requirement for an application and process a effective solution	L2







## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabankuru (Vill), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9869959556.

### B.TECH IV YEAR I SEM ME

Name of the Course Seminar

Course Code ME703PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME703PC.1	Summarize the fundamental concepts and techniques used in mini projects.	L2
ME703PC.2	Develop skill to build design techniques for various problem analyses.	L4
ME703PC.3	Build knowledge through practical assignments and learn the various design methods for solving problems	L2
ME703PC.4	Design identifies basic requirement for an application and process a effective solution	L2

## FOURTH YEAR SECOND SEMESTER

### B.TECH IV YEAR II SEM ME

Name of the Course Industrial Robotics

Course Code : ME811PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME811PE.1	Make the students acquainted with the theoretical aspects of Robotics	L2
ME811PE.2	Make the students to understand the importance of robots in various fields of engineering.	L4
ME811PE.3	Expose the students to various robots and their operational details	L2
ME811PE.4	Enable the students to acquire practical experience in the field of Robotics through design projects and case studies.	L2




**MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY**
*(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)*

P.P.Colony (Po.), Peddabonkuru (Vill), PEDDAPALLI (Mdl. &amp; Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9849472523, +91 9542709545, +91 9989959556.

**B.TECH IV YEAR II SEM ME**

Name of the Course: Industrial Management

Course Code ME821PE

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME821PE.1	• Able to apply tMEhniques for plant location, design plant layout and value analysis	L2
ME821PE.2	Able to apply various quality control tMEhniques and sampling plans	L4
ME821PE.3	Able to do job evaluation and network analysis.	L2
ME821PE.4	Able to design the organization structure	L2

**B.TECH IV YEAR II SEM ME**

Name of the Course 1. Fundamentals of Robotics Course Code

Course Outcome NO	Course Outcome Statement	B.T LEVEL
AP102BS.1	Make the students to understand the importance of robots in various fields of engineering	L2
AP102BS.2	Make the students acquainted with the theoretical aspMEts of Robotics	L4
AP102BS.3	Enable the students to acquire practical experience in the field of Robotics through design projMEts	L2
AP102BS.4	Expose the students to various robots and their operational details	L2



Counselling Code : MTEC

Estd : 1999

JNTUH College Code : 85



## MOTHER THERESSA COLLEGE OF ENGINEERING & TECHNOLOGY

(Approved by A.I.C.T.E, New Delhi & Affiliated to J.N.T.U Hyderabad)

P.P.Colony (Po.), Peddabonkurru (VIII), PEDDAPALLI (Mdl. & Dist.) - 505174, Telangana State.

Website : www.mtec86.ac.in E-mail: mtec.86@gmail.com Contact : +91 9848472023, +91 9542709545, +91 9969958550.

B.TECH IV YEAR II SEM ME

Name of the Course: Project Stage – II Course Code : ME801PC

Course Outcome NO	Course Outcome Statement	B.T LEVEL
ME801PC.1	Understand a detailed action plan for conducting in investigation, including team work.	L2
ME801PC.2	Understand the detailed analysis/modeling/simulation/design/problem solving/experiment as needed.	L2
ME801PC.3	Develop a final product/process, perform testing ,arrive at results &conclusions and suggest future dirMEtions	L2
ME801PC.4	Make a paper for conference presentation/publication, if possible.	L2
ME801PC.5	Make up projMEt enables the student to understand the business process	L2



*Y. Suresh*  
 PRINCIPAL  
 MOTHER THERESSA  
 College of Engineering & Technology  
 PEDDAPALLI-505 174.