



# Vidya Jyothi Institute of Technology

(An Autonomous Institution)

(Accredited by NAAC, Approved by AICTE New Delhi & Permanently Affiliated to JNTUH)  
Aziznagar Gate, C.B. Post, Hyderabad-500 075

## Teaching and Learning Process

### CIVIL ENGINEERING

Faculty Name	Subject	Topic	Innovative methods adopted	Goals	Preparation	The significance of Result	Availability of review and critique	Reproducibility and Reusability
Dr. Pallavi Badry	Geotechnical Engineering	Properties of Soil	Demonstration Based Learning	To demonstrate the concept with some results	Accessories need to make ready for that concept	Enhances the analysis capacity	Report on concept demonstrate will be available for the references	The accessories can be reused for upcoming years with additional consumables
T. Deepika	Geotechnical Engineering	Mass-Volume Relationships	Demonstration Based Learning	To make students understand through practical views of technical concepts	Preparing the concept through photos in the form of presentations	The level of understanding of technical concepts of the students is depicted	Report on concept demonstrate will be available for the references	It is reusable for the upcoming years
Dr. Kamalini Devi	Ground Water Hydrology	Ground water recharge and roof water harvesting system	Model Based Learning	To make students understand through the model preparation	Guiding the students for preparing the model for a concept	It enhances the understanding capacity and analysis ability	Report on concept will be available for the references	It will be useful for the upcoming students in preparation of models through understanding

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E. Giri Prasad Goud	Engineering Geology	Rock & Mineral Properties	Demonstration Based Learning	To demonstrate the physical properties of the rocks through physical visualization.	Students will come with the basic preparation on a topic	Individual students can identify the properties	Report on concept demonstrate will be availed for the references	Basic knowledge will reflect while doing projects
K. Roja	Fluid Mechanics	Surface tension	Demonstration Based Learning	To get the clear idea about the concept	Reference videos and object source are interrelated	The level of understanding of technical concepts of the students is depicted	Report on concept demonstrate will be availed for the references	It can be modified by other methodologies
Dr. Pallavi Badry	Building Materials and Construction	Bricks & Bonding Systems	Demonstration Based Learning	To demonstrate the concept with the same result	Accessories need to arrange	Enhances the learning and analysis skills in students	The report can be developed and make available for review	Accessories Can be reused for upcoming years
Dr. Pallavi Badry	Building Materials and Construction	Brick Classification as per IS	Flipped Classroom	To involve students in self understanding abilities	Topic need to be released for preparation	Improves the understanding skill of students	Report can be developed and make available for review	Can be reused for upcoming batches
K. Satyanarayana	Environmental Engineering	Water treatment units	Field Visit	To make students to understand the practical view of treatment units	Preparation for the designing of treatment units	Understanding the real time design	Report on concept demonstrate will be available for the references	Students of upcoming batches can refer the report or Field visit can be rearranged
Dr. Pallavi Badry	Building Materials and Construction	Different types of Cement and its uses in Construction	Mind Mapping	Involve students in learning with self study concept	Need to work on suitable topic where technique is suitable	Improve conceptual understanding with linking and drawing abilities	The map will be made available for review	The map can be reused for upcoming batches to make understand the concept of mind mapping
P.Naga Mohan	Strength of Materials - II	Load carrying capacity of columns	Think Pair and Share	To know the validity of different theories	Formation of batches	Enhances the analysis of columns	-	Basic knowledge will reflect while doing the project

T. Deepika	Geotechnical Engineering	Compaction	Visualization	Creating a virtual learning environment to give basic understanding	Preparation of videos makes the students to understand in practical thinking	Students are exposed to the practical knowledge of thinking	Report on concept demonstrate will be availed for the references	Concepts can be stored & viewed by the students
T. Sarada	Smart City	Smart housing & smart electricity	Mind Mapping	It is a platform to enhance their knowledge	Different groups will discuss the concept and they will prepare on paper	Different ideas can be shared, and they can present well in their exams	Report on concept demonstrate will be availed for the references	It can also have a new look to represent
Divya Vani	Remote Sensing & Geographic Information System	Sensors and Scanners	Visualization	To show the difference between various kinds of sensors and scanners along with their functioning	Videos have been downloaded to show the working of along and across scanners	Students will be able to differentiate between sensors and scanners and also understand various kinds of scanners	Report on concept demonstrate will be availed for the references	Students can be able to identify and obtain information by selecting from the various sensors and scanners based on specific objective
V. Swathi	Estimation & Costing	Bar Bending Schedule	Field Visit to VJIT E block	Understanding the technical concepts of field work	Students can be taken to the site and interact with engineers	Students can be exposed to the constructional practices	Report on concept demonstrate will be available for the references	Students of upcoming batches can refer the report or Field visit can be rearranged
G.Sreeja	Environmental engineering	Wastewater treatment	Think Pair and Share	Students will be able to know the different types of treatment methods	Formation of batches	Enhances various treatment plants	-	Basic knowledge will reflect while doing the project
Dr. C. Krishna Raju	RS & GIS	Components of GIS and types of data	Think Pair and Share	Students will be able to explore the various types of data	Need to know basics of data types	Students will be able to extract or differentiate spatial and attribute data	Examples of various soft copy and hard copy details	Previous years data can be reviewed or present batch students data can be acquired

## Teaching & Learning Process

Name of the Faculty	Topic	Subject	Innovative Methods Adopted
<b>ELECTRICAL AND ELECTRONICS ENGINEERING</b>			
Dr. D.Bala Gangi Reddy	Electrical Distribution Systems	Electrical Distribution Systems	Mind Map
Dr. S. Siva Prasad	Converters for different Drives	Power Semi Conductor Drives	Mind Map
Dr. C. N. Ravi	Transmission System	Power systems -II	Mind Map
Dr. G. Madhusudhana Rao	Application of EMF Laws	Electro Magnetic Fields	Mind Map
Mr. K. Dheeraj	Design of P,PI,PID Controllers	Control Systems	Mind Map
Mr. Vikram Chandha	Faradays laws & Transformers	Basic Electrical Engineering	Demonstration Model
Mr. B.Sudhakar Reddy	2D,3D Models	Electro Magnetic Fields	Demonstration Model
Mr. B. Rajesh	Converters for DC & AC Applications	Power Electronics	Mind Map
Mrs. A.Srilatha	DC & AC machine Models	Basic Electrical Engineering	Demonstration Model

  
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<b>MECHANICAL ENGINEERING</b>			
Dr. L.Madan Anand Kumar	Thermal Engineering	Thermodynamic cycles	Creating Research groups and Clubs
Mr. M. Naveen Kumar	Finite Element Method	CST & LST Elements	Problem based Learning
P. Sampath Kumar	Machine Tools	Machining Operations	Flipped Classroom
Dr.B. Sudha Bindu	Metallurgy & Material Science	Heat Treatment Processes	Fishbowl debate
T. Virajee	CAD/CAM	CNC machines	Collaborative Learning
Mr. C Rravi	Thermal engineering	Pulse detonation engine	Problem based learning
Ms. Ememma	Power plant engineering	Nuclear power plant	Collaborative learning
Mr. Naveen Kumar	CAD/CAM	Cad presentation on Robber space technologies	Creating research groups and clubs
Mr. P Sampath Kumar	Production technology	Resistance welding	Project based learning
Dr. L.Madan	Power plant engineering	Nuclear power plant	Collaborative learning
Mr. Pradeep Kumar	DMM-1	Shaft	fishbone technique
Dr. PhanindraBogu	CAD/CAM	3D printing	Project based learning
G. Rajesh Babu	Design of Machine Members	IC Engine parts	Seminar by students for specific topic

  
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## ELECTRONICS AND COMMUNICATION ENGINEERING

Dr.K.Vasanth	Classification and Characteristics of Embedded Systems	Fundamentals of Embedded Systems	Mind Map
M.LalithaSowmya	Classification and Characteristics of Embedded Systems	Fundamentals of Embedded Systems	Mind Map
A.Jaya Lakshmi	History, Types and applications of Communications	Principles of Communications	Mind Map
M.Nirmala	History, Types and applications of Communications	Principles of Communications	Mind Map
E.Kalpana	Electromagnetic waves Directions	EMTL	Demonstration Model
M.Lalitha Sowmya	Micro controllers using washing machine	Introduction to Micro Controllers and applications	Mind Map
M.Lalitha Sowmya	Applications Microcontrollers	Embedded system Design	Mind map

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## COMPUTER SCIENCE AND ENGINEERING

D.Venkateshwarlu	K-means Algorithm	DWDM	Think-Pair-Share
B.Sailaja	Air Line Reservation System	DBMS	Case Based Learning
S.Divya	File Allocation Methods	OS	Flipped Classroom
A.Swarna	Big Data Failure	BDA	Case Based Learning
S.Divya	Data Transmission	CN	Role Play
M.Vijaya	Context Models: Hotel Manageme	SE	Think-Pair-Share
B.Vikas	Object Construction, Inheritance- Polymorphism	JP	Simulation IDE-BlueJ Game Based Learning, Peer Competition
M.Vijaya	Phases of Compiler	CD	Role Play
Y.Prabhu Kumar	Word Count	BDA	Role Play
B.Vikas	Strings, Pointers & Files	Programming for Problem Solving-II	Game Based Learning, Peer Competition
Y.Prabhu Kumar	Map Reduce	DWDM	Project Based Learning
M.Tarakeshwar Rao	Dictionaries in Python	Python	Learning by Doing
G.Surekha	Analysis on Protocols	CN	Case Based Learning
S.Divya	System Models: ATM MS	SE	Interactive Learning
B.Vikas	Website	PPS	Collaborative Learning
M.Tarakeshwar Rao	All topics of Java	JAVA	Youtube playlist
B.Sailaja	Divide on conquer	DAA	Poster Presenattion
B.Sailaja	Quick Sort	DAA	Roleplay
B.Vikas	Arrays	PPS	Pair programming
B.Vikas	Loops	PPS	Unconference Class
B.Vikas	Arrays, Structures	PPS	Competitive Learning
B.Vikas	Input/Output statements	PPS	Padlet – Practice Platform
B.Vikas	Assignments and Material	PPS	Google Classroom
B.Vikas	Class Test	PPS	Book Widgets
B.Vikas	Class Poll	PPS	Padlet – Tool for Poll (Collaborative Learning)
K. Samata	Timeline	PPS	Padlet

*A. Prasanna*

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<b>INFORMATION TECHNOLOGY</b>			
G.Indira Priyadarshini	Real Time Application	Mobile Application Development	Project Based Learning & Case Study
B.EswarBabu	Application Development	Python Programming	Project Based Learning & Case Study
T.Devi	Inter Process Communication	Linux Programming	Project Based Learning & Case Study
S.Anuradha	Software Testing	Software Testing Methodologies	Case Study
J.Bramaramba	IP Scheduling Algorithms	Computer Networks	Flipped Class Room
M.SureshBabu	Page Replacement Algorithms	Operating Systems	Collaborative Learning (or) Problem Based
Dr.SRM Krishna	Recurrence Relations	Mathematical Foundations for Computer Science	Collaborative Learning (or) Problem Based
Laxmi Sony	Applications of Data structures	Data Structures	Collaborative Learning (or) Problem Based

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<b>HUMANITIES AND SCIENCES</b>			
Dr. Indira Priyadarshini	Tenses(Grammar)	English	Flipped Classroom
Dr. Indira Priyadarshini	LSRWVG skills	English	Mobile Assisted Language Learning
Dr. Indira Priyadarshini	Prose / Grammar	English	Flicker Cards
Dr. Kondala Rao	Matrices	M-I	Flipped Classroom
Ms. K. Sree Vani	Phonetics, Intonation , Prose	ELS Lab	Flipped Classroom
Ms. K. Sree Vani	Vocabulary Building	English	Think-Pair-Share
Ms. J. Sree Devi	Prose, Grammar	English	Jigsaw
Dr. Indira Priyadarshini	Tenses(Grammar)	English	Flipped Classroom
<b>MASTER OF BUSINESS ADMINISTRATION</b>			
Dr. P. Chakradhar	Modern Management Techniques	Management Organizational Behaviour	Contextual Learning
Dr. K.V.R Satya Kumar	Iso Standards	Total Quality Management	Contextual Learning
P.Suneela Bharathi	Total Productivity Maintenance	Total Quality Management	Demonstration Model
A.K.Srujana	Indian Business Heritage	Indian Ethos & Values	Contextual Learning
K.Kavitha	Business Model	Fundamentals Of Entrepreneurship	Contextual Learning

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