

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY:: TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	Power System Operation & Control
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M9901
Name of the Faculty:	G. Venkat

COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Describe the unit commitment problem for economic load dispatch.	Knowledge
CO 2	Get the knowledge of load frequency control of single area system with and without control.	Knowledge
CO3	Get the knowledge of load frequency control of two area system with and without control.	Knowledge
CO4	Know the effect of generation with limited energy supply.	Apply
CO 5	Illustrate the interchange evaluation in interconnected power systems.	Analyze

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	Analysis of Power Electronics Converter
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M4302
Name of the Faculty:	K. Nageswara Rao

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Describe and analyze the operation of AC-DC converters.	Knowledge
CO 2	Analyze the operation of power factor correction converters.	Analyze
CO3	Analyze the operation of three phase inverters with PWM control.	Analyze
CO4	Explain the principles of operation of multi- level inverters and their applications.	Knowledge

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY:: TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	ELECTRICAL DISTRIBUTION AUTOMATION
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M9904
Name of the Faculty:	T. Srinivasa Rao

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Analyse a distribution system.	Analyze
CO 2	Design equipment for distribution system and sub-stations.	Create
CO3	Design protective systems and co-ordinate the devices.	Create
CO4	Understand of capacitive compensation.	Understand
CO 5	Understand of distribution automation.	Understand

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY:: TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	HVDC Transmission
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M6204
Name of the Faculty:	Prof J.Ganesh Prasad Reddy

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Define the various schemes of HVDC transmission.	Knowledge
CO 2	Understand the basic HVDC transmission equipment.	Understand
CO3	Explain the control of HVDC systems.	Knowledge
CO4	Understand the interaction between HVAC and HVDC system.	Understand
CO 5	Illustrate the various protection schemes of HVDC engineering.	Analyze

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Course outcome

Course Title:	Research Methodology & IPR
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M0109
Name of the Faculty:	G.Tejaswi

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Explain the Meaning of research problem, Sources	Knowledge
CO 2	Describe the Effective literature studies approaches, analysis	Knowledge
CO3	Illustrate the Nature of Intellectual Property	Knowledge
CO4	Explain Patent Rights, Scope of Patent Rights	Apply
CO 5	Understand the New Developments in IPR	Analyze

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	Power System Simulation Laboratory – I
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M9901
Name of the Faculty:	K. Kiran Kumar/J. Ganesh Prasad Reddy

COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Analyse the performance of the various transmission lines at different loading conditions	Analyze
CO 2	Perform the load flow study on distribution systems	Knowledge
CO3	Calculate the different line parameters of 3-phase symmetrical and unsymmetrical transmission lines	Knowledge
CO4	Compute the reflection and refraction coefficients of voltages and currents in the transmissions	Apply
CO 5	Compare the Z- and Y-bus matrices for the given power transmission system	Understand

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY:: TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome mapping with PO's and PSO's

Course Title:	Power Systems Laboratory
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-I
Regulation:	R19
Subject Code:	M9901
Name of the Faculty:	Ch. Pavan Kumar

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Understand the experimental determination of various parameters used in power system area	Understand
CO 2	Analyse the performance of transmission line with compensation	Knowledge
CO3	Analyse the performance of transmission line without compensation	Knowledge
CO4	Determination of various parameters used in power system as well as performance of transmission line.	Apply

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	PSDS
Programme:	M.Tech
Academic Year	2019-20
Year/Semester:	I-II
Regulation:	R16
Subject Code:	
Name of the Faculty:	T. Pardha saradhi

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Determine the model of synchronous machines.	Understand
CO 2	Know the stability studies of synchronous machines.	Knowledge
CO3	Get the knowledge of solution methods of transient stability.	Knowledge
CO4	Know the effect of different excitation systems in power systems.	Apply

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	FACTS
Programme:	M.Tech
Academic Year	2019-20
Year/Semester:	I-II
Regulation:	R16
Subject Code:	
Name of the Faculty:	G. Tejaswi

COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Know the performance improvement of transmission system with FACTS.	Understand
CO 2	Get the knowledge of effect of static shunt and series compensation.	Knowledge
CO3	Know the principle of operation and various controls of UPFC	Knowledge
CO4	Determine an appropriate FACTS device for different types of applications.	Apply

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
Department of Electrical & Electronics Engineering
Course outcome

Course Title:	RTPS
Programme:	M.Tech
Academic Year	2019-20
Year/Semester:	I-II
Regulation:	R16
Subject Code:	
Name of the Faculty:	T.SrinivasaRao

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Understand state estimation, security and contingency evaluation.	Understand
CO 2	Understand about Supervisory control and data acquisition.	Knowledge
CO3	Real time software application to state estimation.	Knowledge
CO4	Understand application of AI in power system.	Apply

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Course Title:	Power Systems Laboratory
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-II
Regulation:	R19
Subject Code:	
Name of the Faculty:	Ch. Pavan Kumar

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Understand the experimental determination of various parameters used in power system area	Understand
CO 2	Analyse the performance of transmission line with compensation	Knowledge
CO3	Analyse the performance of transmission line without compensation	Knowledge
CO4	Determination of various parameters used in power system as well as performance of transmission line.	Apply

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
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Course outcome

Course Title:	EAA
Programme:	M.Tech
Academic Year	2019-2020
Year/Semester:	I-II
Regulation:	R19
Subject Code:	N5602
Name of the Faculty:	Ch. Pavan Kumar

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	State and formulate the optimization problem, without and with constraints, by using design variables from an engineering design problem.	Knowledge
CO 2	Apply classical optimization techniques to minimize or maximize a multi-variable objective function, without or with constraints, and arrive at an optimal solution.	Apply
CO3	Formulate a mathematical model and apply linear programming technique by using Simplex method. Also extend the concept of dual Simplex method for optimal solutions.	Knowledge
CO4	Apply gradient and non-gradient methods to nonlinear optimization problems and use interior or exterior penalty functions for the constraints to derive the optimal solutions.	Apply
CO 5	Apply Genetic algorithms for simple electrical problems and able to solve practical problems using PSO.	Apply

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY::TIRUVURU
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Course outcome

Course Title:	Artificial Intelligent Techniques
Programme:	M.Tech
Academic Year	2019-2020/21
Year/Semester:	II/III
Regulation:	R19
Subject Code:	M9901
Name of the Faculty:	V.Murali Krishna

COURSE OUTCOMES(COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Differentiate between Algorithmic based methods and knowledge based methods.	Knowledge
CO 2	Use appropriate AI framework for solving power system problems.	Knowledge
CO3	To design fuzzy logic controllers for power engineering applications.	Knowledge

SREE VAHINI INSTITUTE OF SCIENCE & TECHNOLOGY:: TIRUVURU
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Course outcome

Course Title:	Smart Grid Technologies
Programme:	M.Tech
Academic Year	2019-2020/21
Year/Semester:	II-III
Regulation:	R19
Subject Code:	M9901
Name of the Faculty:	T.SrinivasaRao

COURSE OUTCOMES (COs):

Upon completion of the course, students will be able to:

S.No.	Course Outcomes	Blooms Taxonomy level
CO1	Understand smart grids and analyze the smart grid policies and developments in smart grids.	Knowledge
CO 2	Develop concepts of smart grid technologies in hybrid electrical vehicles etc.	Knowledge
CO3	Understand smart substations, feeder automation, GIS etc.	Knowledge
CO4	Analyze micro grids and distributed generation systems.	Apply
CO 5	Analyze the effect of power quality in smart grid and to understand latest developments in ICT for smart grid.	Analyze