SYMBIOSIS INTERNATIONAL (DEEMED UNIVERSITY)

Learning Management System

Academic Year : 2022-2023 Institute/ Branch Name : Symbiosis Statistical Institute Programme Name : Master of Science (Applied Statistics)

Report Generated On 04-05-2023 15:40:35

Color Code Description:		
Global	National / Local	Regional / National

Sr. No.	GA No.	Graduate Attributes	PO No.	Programme Outcomes
1	GA1	Scholarship: research, inquiry and lifelong learning	PO1	Nurturing the curious minds towards translation and application of statistical knowledge to find solutions to real-world problems.
2	GA1	Scholarship: research, inquiry and lifelong learning	PO2	Help in preparing the next generation statisticians ready for scientific decision-making, aided with advanced statistical software translating into sharp and extensive analytics, pertinent to various domains.
3	GA2	Global citizenship: ethical, social and professional understanding	PO2	Help in preparing the next generation statisticians ready for scientific decision-making, aided with advanced statistical software translating into sharp and extensive analytics, pertinent to various domains.
4	GA3	Eco-literate: sensitivity towards a sustainable environment	PO3	Empower students to investigate, solve questions for which answer lies beyond the boundaries of conventional thinking.
5	GA4	Employability: equipped with skills, attributes, leadership and entrepreneurial qualities that society needs; being capable of making a contribution to society through earning a living	PO4	Support critical thinking for data-driven solution with advanced methodologies.
6	GA3	Eco-literate: sensitivity towards a sustainable environment	PO5	Recognize the need and have the preparation and ability to engage in independent and continuous learning in the broadest context of technology.
7	GA4	Employability: equipped with skills, attributes, leadership and entrepreneurial qualities that society needs; being capable of making a contribution to society through earning a living	PO5	Recognize the need and have the preparation and ability to engage in independent and continuous learning in the broadest context of technology.

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
1	SEM I	0606410101 - PP	T6684	Probability Distributions	CO1	Define the principal concepts of basic probability	Strong-H	Moderate-M	Strong-H	Strong-H	Moderate-M
1					CO2	Explain the concept of a random variable and the probability distributions.	Strong-H	Moderate-M	Strong-H	Strong-H	Moderate-M
1					CO3	Identify an appropriate probability distribution for a given discrete or continuous random variable and use its properties to calculate probabilities.	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
1					CO4	Solve the problems related to discrete and continuous probability distribution	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
1					CO5	Apply problem-solving techniques to solving real-world events.	Strong-H	Moderate-M	Strong-H	Strong-H	Moderate-M
1					CO6	Communicate concepts in probability using both technical and non-technical language.	Strong-H	Moderate-M	Strong-H	Strong-H	Moderate-M

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
2	SEM I	0606410102 - PP	T6695	Probability Theroy And Applications	CO1	Understand and use fundamental concepts of probability theory	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
2					CO2	Learn about some convergences that are used in Probability Theory.	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
2					CO3	Demonstrate capacity for mathematical reasoning through analyzing, proving and explaining concepts from probability theory	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
2					CO4	Solve problems using probabilistic methods and ideas	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
2					CO5	Demonstrate accurate and efficient use of probability theory techniques, including limiting processes	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
2					CO6	Deal with situations involving uncertainty and will provide a foundation for understanding statistical applications.	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
3	SEM I	0606410103 - PP	T6687	Sampling Theory	CO1	Identify and recognize the appropriate sample survey design for related problems.	Strong-H	Moderate-M	Moderate-M	Moderate-M	Strong-H
3					CO2	Understand the concepts of bias and sampling variability and stragies for reducing these,	Strong-H	Moderate-M	Moderate-M	Moderate-M	Strong-H
3					CO3	Conduct sample survey for the wider range research problems	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
3					CO4	Determine an estimate of a population mean, total and proportion for various types of sampling schemes	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
3					CO5	Have an appreciation of the practical issues arising in sampling studies	Strong-H	Moderate-M	Moderate-M	Moderate-M	Strong-H
3					CO6	Address practical problems and give a sound scientific interpretation to the results.	Strong-H	Moderate-M	Moderate-M	Moderate-M	Strong-H
4	SEM I	0606410104 - PP	T6688	Statistical Computing	CO1	Understand the basic concepts and requisites of random number generation	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
4					CO2	Understand some computer intensive methods for statistical inference.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
4					CO3	Apply the basic concepts of computer programming to solve complex problems of statistics	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
4					CO4	Use a fundamental tool for computing in the practice of quantitative analytical methods	Moderate-M	Strong-H	Strong-H	Moderate-M	Strong-H
4					CO5	Students will be able to simulate random variables and random experiments	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
4					CO6	Create quantitative models to solve real world problems in appropriate contexts.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
5	SEM I	0606410105 - PP	T6699	Multivariate Statistics-I	CO1	Explore and summarize multivariate data using graphical and numerical methods and techniques to uncover hidden information and patterns.	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
5					CO2	Describe properties of multivariate distributions	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
5					CO3	Carry out multivariate statistical techniques and methods efficiently and effectively.	Strong-H	Strong-H	Strong-H	Strong-H	Moderate-M
5					CO4	Develop the best statistical test for the mean vector of the multivariate normal distribution	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
5					CO5	Able to draw statistical inference on parameters of multivariate normal distribution	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
6	SEM I	0606410106 - PP	T4725	Research Methodology	CO1	Understand some basic concepts of research and its methodologies	Moderate-M	Moderate-M	Strong-H	Strong-H	Moderate-M
6					CO2	Select and define appropriate research problem and parameters	Moderate-M	Moderate-M	Moderate-M	Strong-H	Moderate-M
6					CO3	Evaluate different scientific research designs and methods	Moderate-M	Strong-H	Moderate-M	Strong-H	Strong-H
6					CO4	Organize and conduct research in a more appropriate manner	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
6					CO5	Organize and conduct research in a more appropriate manner	Moderate-M	Moderate-M	Strong-H	Strong-H	Moderate-M
7	SEM I	0606410107 - PP	T4005	Integrated Disaster Management	CO1	Provide an understanding of the social nature of natural hazards and disasters	Moderate-M	Moderate-M	-	-	-
7					CO2	Give students knowledge of the social factors affecting disaster mitigation, preparedness, response, and recovery.	Moderate-M	Moderate-M	-	-	-
7					CO3	Create or strengthen an appreciation for the practical value of theory with a strong focus on capacity building and evidence based practice.	Moderate-M	Moderate-M	-	Moderate-M	-
7					CO4	Increase awareness of opportunities for applying social work and emergency management skills	Moderate-M	Moderate-M	Moderate-M	Moderate-M	Moderate-M
7					CO5	Student will able to apply basic humanitarian and social work values and ethics to practice at the concentration practicum site	Moderate-M	Moderate-M	Moderate-M	Moderate-M	Moderate-M
8	SEM III	0606410302 - PP	T6703	Statistical Learning and Data Mining	CO1	Recognize the importance of statistical learning, data mining, modeling, simulation and computing, and the role of approximation and mathematical approaches to analyze the real world problems.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
8					CO2	Demonstrate the ability to use skills in Data Mining and its related areas of technology for formulating and tackling Data Mining related problems	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
8					CO3	Identifying and applying appropriate principles and methodologies to solve a wide range of problems associated with data mining.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
8					CO4	Handle large scale analytics projects from various domains.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
8					CO5	Evaluate various data mining algorithms for a variety of problems.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
8					CO6	Develop intelligent decision support systems	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
9	SEM III	0606410303 - PP	F0004	Optimization Techniques	CO1	Recognize a range of operations research problems as linear programming problems, and be able to solve them computationally.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
9					CO2	Demonstrate an understanding how the most widely used linear programming algorithms work.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
9					CO3	Apply duality theory to prove optimality of a solution.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
9					CO4	Interpret the solutions of optimization problems, including analyzing sensitivity of solutions.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
9					CO5	Implement several iterative algorithms for solving constrained and unconstrained non-linear optimization problems and understand the mathematics behind these.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
9					CO6	Formulate and solve general non-linear programs arising in engineering, data science and other areas.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
10	SEM III	0606410304 - PP	T6708	Scientific and Report Writing	CO1	Structure a piece of scientific writing effectively	Moderate-M	Strong-H	Strong-H	Strong-H	Moderate-M
10					CO2	Understand some of the common features of scientific style	Moderate-M	Strong-H	Strong-H	Strong-H	Moderate-M
10					CO3	Write more critically and identify the difference between description and analysis	Strong-H	Moderate-M	Moderate-M	Moderate-M	Moderate-M
10					CO4	Avoid plagiarism and be able to paraphrase scientific ideas	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
10					CO5	Write a scientific report according to typical conventions	Strong-H	Strong-H	Strong-H	Strong-H	Moderate-M
11	SEM III	0606410305 - PP	T0100	Research Publication	CO1	To understand the various real life problems.	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
11					CO2	To regognize the available statistical methods for resolving the stated problem.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
11					CO3	To impliment statistical techniques as per the problem.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
11					CO4	To analyse the data.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
11					CO5	To validate the applied statistical methods and models.	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
11					CO6	To write a quality research article.	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
12	SEM III	0606410306 - PP	T6918	Bayesian Inference	CO1	Bayesian inferential framework. The fundamentals: prior, likelihood, 8 posterior. Conjugate, Jeffrey?"s and improper priors with examples, Bayes Point estimation, Concept of Loss functions, squared error, absolute error and 0-1 error loss functions. Conjugate prior for exponential family	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
12					CO2	Bayesian testing of hypotheses- Specification of the appropriate 7 form of the prior distribution for a Bayesian testing of hypothesis problem. Prior odds Posterior odds, Bayes factor for various types of testing hypothesis problems depending upon whether the null hypothesis and the alternative hypothesis are simple or composite	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
12					CO3	Bayesian interval estimation- Credible intervals. Highest posterior density regions	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
12					CO4	Computation- How to explore the posterior: numerical integration, importance sampling, Gibbs sampler, MCMC schemes	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
12					CO5	Bayesian regression- Standard framework for multivariate Gaussian distributions; prior distribution on variance-covariance	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
12					CO6	Problem solving and Experiential Learning with OpenBUGS	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
13	SEM III	0606410310 - PP	T6705	Statistical Simulation	CO1	Recognize the concept of a Markov Chain and its potential applications.	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
13					CO2	Understand the rationale for statistical simulation and its potential applications.	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
13					CO3	Apply Monte Carlo methods for simulate variour situations to achieve bussiness goals.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
13					CO4	Use statistical software to perform a simulation study and then report the results in a manner suitable for publication.	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
13					CO5	Perform simulation studies for evaluation of statistical methods.	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
13					CO6	Identify and interpret relevant information in the output of the simulation study	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
14	SEM III	0606410311 - PP	T6849	Big Data Analytics	CO1	Recall the importance of data in making a business decision.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
14					CO2	Understand and apply scaling up machine learning techniques and associated computing techniques and technologies.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
14					CO3	Recognize and implement various ways of selecting suitable model parameters for different machine learning techniques.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
14					CO4	Solve problems associated with batch learning and online learning, and the big data characteristics such as high dimensionality, dynamically growing data and in particular scalability issues.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
14					CO5	Choose machine learning techniques and computing environment that are suitable for the applications under consideration.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
14					CO6	Integrate machine learning libraries and mathematical, and statistical tools with modern technologies like hadoop and mapreduce	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
15	SEM III	0606410312 - PP	T6852	Stochastic Models In Finance	CO1	Apply modern probability theory, stochastic calculus, to stochastic models in finance.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
15					CO2	Demonstrate accurate and efficient use of probability theory techniques.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
15					CO3	Build, analyze and simulate basic stochastic models for simple real-life random phenomena evolving in time.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
15					CO4	Apply problem-solving using probabilistic methods in various situations.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
15					CO5	Gain adequate skill to address practical problems and give a sound scientific interpretation to the results.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
16	SEM III	0606410313 - PP	T6851	Statistical Quality Control	CO1	Help students to learn, understand concepts of quality control and statistical process control.	Strong-H	Strong-H	Strong-H	Moderate-M	Weak-L
16					CO2	Application of Control charts, Process capability and acceptance sampling techniques.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
16					CO3	Gain adequate skill to address practical problems and give a sound scientific interpretation to the results.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
16					CO4	This course will cater the needs of the students who want to get a job in analytics, process control and of the students who will pursue academics further as well.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
17	SEM II	0606410201 - PP	T6697	Statistical Inference	CO1	Understand the principles of sufficiency and minimal sufficiency	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
17					CO2	Understand the concept of a family of probability distributions and the exponential family of distributions	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
17					CO3	Understand the concepts of accuracy, precision, and efficiency of estimators	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
17					CO4	Understand the role of likelihood function in testing of statistical hypotheses	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
17					CO5	Able to construct estimators having desirable statistical properties	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
17					CO6	Able to develop the best statistical test for a given statistical hypothesis	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
18	SEM II	0606410202 - PP	T6701	Multivariate Statistical Analysis-II	CO1	Recognize the evolution of multivariate analysis and its significances in businesses research	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
18					CO2	Understand the formulation of Multivariate Analysis models encountered in business research.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
18					CO3	Apply multivariate analysis models to real data sets	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
18					CO4	Analyze business problems using the power of well- known multivariate analysis tools and techniques	Strong-H	Strong-H	Strong-H	Moderate-M	Strong-H
18					CO5	Evaluate different models from a scientific perspective, and judge what multivariate analysis methods that are suitable to use in different situations	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
18					CO6	Build a multivariate statistical models for research problems thrugh softwares	Strong-H	Strong-H	Moderate-M	Strong-H	Strong-H
19	SEM II	0606410203 - PP	T6696	Linear Models	CO1	Develop a deeper understanding of the linear regression model and its limitations	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
19					CO2	Develop the linear predictive models and their extensions in non-linear models, non-parametric models, generalized models.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
19					CO3	Diagnose and apply corrections to some problems with the generalized linear model found in real data	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
19					CO4	Address practical problems and give a sound scientific interpretation to the results.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
19					CO5	Assess the model using standard criterions	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
19					CO6	Use standard statistical software to develop models and analyze data that arise from different fields.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
20	SEM II	0606410204 - PP	T6698	Stochastic Processes	CO1	Understand the concept of Markov dependence in a sequence of random variables	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
20					CO2	Understand statistical properties of finite Markov chains	Strong-H	Moderate-M	Moderate-M	Moderate-M	Strong-H
20					CO3	Understand different stochastic processes like branching process, birth-and-death process, and Poisson process	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
20					CO4	Understand a renewal process and its asymptotic properties	Strong-H	Moderate-M	Moderate-M	Strong-H	Strong-H
20					CO5	Use a stochastic process to describe and analyze and observed phenomenon statistical inference	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
20					CO6	Formulate simple stochastic process models in the time domain and provide qualitative and quantitative analyses of such models.	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
21	SEM II	0606410205 - PP	T6700	Design of Experiments	CO1	Understand the potential practical problems and applications of design of experiments in various fields.	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
21					CO2	Build a deeper understanding, and tools for analysis of experiments	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
21					CO3	Describe how the analysis of the data from the experiment should be carried out	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
21					CO4	Use a statistical computing package to analyse real-life data	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
21					CO5	Appreciate the advantages and disadvantages of a design for a particular experiments	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
21					CO6	Use software tools to create custom designs based on optimal design methodology for situations where standard designs are not easily applicable.	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
22	SEM II	0606410206 - PP	T6725	Time Series Analysis	CO1	Recognize and verify mathematical considerations for analyzing time series, including concepts of white noise, stationarity, autocovariance and autocorrelation	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
22					CO2	Understand the differences between cross-sections and time series.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
22					CO3	Apply various techniques for the modeling: including parameter estimation	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
22					CO4	Use time series models for predicting future observations and/or estimating unobservable components.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
22					CO5	Evaluate time series models and validate assumptions through residual sequence diagnosis	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
22					CO6	Address practical problems and give a sound scientific interpretation to the results.	Strong-H	Strong-H	Moderate-M	Moderate-M	Strong-H
23	SEM IV	0606410401 - PP	T6706	Statistical Machine Learning	CO1	Recall difference between supervised learning and unsupervised learning.	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
23					CO2	Understand statistical learning problems into tractable sub-problems	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
23					CO3	Apply efficient machine learning algorithms on a computer for a wider range of problems	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
23					CO4	Develop linear and nonlinear models for classification and regression.	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
23					CO5	Use cross validation for evaluation and selecting parameters of model.	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
23					CO6	Formulate a mathematical solution to the problems and implement this solution using statistical software.	Strong-H	Moderate-M	Strong-H	Moderate-M	Strong-H
24	SEM IV	0606410402 - PP	T6808	Industry Project In Specilization	CO1	Recall the basic concepts & broad principles of Industrial projects	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
24					CO2	Understand impact of engineering solutions and industrial safety in a global and social context	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
24					CO3	Apply the theoretical concepts to solve industrial problems with teamwork and multidisciplinary approach	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
24					CO4	Analyze and examin the data from different perspectives and summarizing to generate new information.	Strong-H	Strong-H	Strong-H	Strong-H	Strong-H
24					CO5	Validate the analysis method for its suitability for the problem	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H
24					CO6	Report research findings in written and verbal forms.	Strong-H	Moderate-M	Strong-H	Strong-H	Strong-H

Sr. No.	Semester	Institute Course Code	Catalog Course Code	Title	Course Outcome No	Course Outcome Statement	PO1	PO2	PO3	PO4	PO5
25	SEM IV	0606410403 - PP	T6809	Seminar	CO1	Students will demonstrate the ability to collaborate with others.	Strong-H	Moderate-M	Moderate-M	Weak-L	Moderate-M
25					CO2	Students will demonstrate the ability to prepare appropriately to participate effectively in class discussion.	Moderate-M	Moderate-M	Moderate-M	Weak-L	Moderate-M
25					CO3	Students will demonstrate the ability to follow discussions, oral arguments, and presentations, noting main points or evidence and tracking threads through different comments.	Moderate-M	Moderate-M	Moderate-M	Moderate-M	Moderate-M
25					CO4	Students will demonstrate the ability to offer compelling, articulate oral arguments, showing an understanding of the unique demands of oral presentation.	Moderate-M	Moderate-M	Moderate-M	Moderate-M	Moderate-M
25					CO5	Students will demonstrate the ability to speak and debate with an appreciation.	Moderate-M	Moderate-M	Moderate-M	Moderate-M	Moderate-M