



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



1. Program Outcomes (POs) and Program Specific Outcomes (PSOs)

Department of Information Technology

Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

2. Program Specific Outcomes (PSOs)

At the end of BTECH program Information Technology graduates will be able to:

- PSO1:** To create, select, and apply appropriate techniques, resources, modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- PSO2:** To manage complex IT projects with consideration of the human, financial, ethical and environmental factors and an understanding of risk management processes, and operational and policy implications.



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping First Semester

Subject Code :	HS 8151	Semester :	I
Subject Name :	Communicative English		
Course Outcome			
C101.1	Communicate clearly both in the written form and orally using appropriate vocabulary and comprehend written texts to make inferences.		
C101.2	Speak persuasively in different social contexts and write biographical detail and technical documents cohesively, coherently and flawlessly using appropriate words.		
C101.3	Speak, read and write effectively for a variety of professional and social settings.		
C101.4	Read descriptive, narrative, expository and interpretive texts and write using creative, critical, analytical and evaluative methods.		
C101.5	Listen, comprehend and respond to different spoken and written discourses/excerpts in different accents and write different genres of texts adopting various writing strategies.		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C101.1	1	2	2	1	-	1	-	-	2	3	1	1	-	-
C101.2	1	1	1	2	-	1	-	-	1	3	-	1	-	-
C101.3	2	1	2	3	-	1	1	-	-	2	1	1	3	-
C101.4	-	-	-	-	-	-	-	-	2	2	-	1	1	-
C101.5	2	2	1	2	2	1	3	-	2	3	1	1	1	-
Total	6	6	6	8	2	4	4	-	7	13	3	5	5	-
No. of COs Mapping with Pos	4	4	4	4	1	4	2	-	4	5	4	5	3	-
Average	1. 2	1. 2	1. 2	1. 6	.4	.8	.8	-	1. 4	2. 6	.6	1	1	-
Round (Average)	1	1	1	2	0	1	1	-	1	3	1	1	1	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	MA8151	Semester :	I
Subject Name :	Engineering Mathematics - I		
Course Outcome			
C102.1	Use both the limit definition and rules of differentiation to differentiate functions.		
C102.2	Apply differentiation to solve maxima and minima problems.		
C102.3	Evaluate integrals both by using Riemann sums and by using the Fundamental Theorem of Calculus, also evaluate integrals using techniques of integration, such as substitution, partial fractions and integration by parts, in addition to determine convergence/divergence of improper integrals and evaluate convergent improper integrals.		
C102.4	Apply integration to compute multiple integrals, area, volume, integrals in polar coordinates, in addition to change of order and change of variables.		
C102.5	Apply various techniques in solving differential equations.		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C102.1	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.2	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.3	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.4	3	3	3	1	-	-	-	-	2	-	-	2	1	-
C102.5	3	3	3	1	-	-	-	-	2	-	-	2	1	-
Total	15	15	15	5	-	-	-	-	10	-	-	10	5	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	-	-	-	-	-
Average	3	3	3	1	-	-	-	-	2	-	-	2	1	-
Round (Average)	3	3	3	1	-	-	-	-	-	-	-	2	1	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CY 8151	Semester :	I
Subject Name :	Engineering Chemistry		
Course Outcome			
C104.1	Describe the importance of water technology in the purification of water and its domestic and industrial applications.		
C104.2	Illustrate the concepts of adsorption in surface chemistry and catalysis and its applications.		
C104.3	Review the use of phase rule in identifying its applications in metallurgy and manufacture of alloys.		
C104.4	Compare the different types of industrial techniques of petroleum processing and the determination of calorific values and combustion parameters.		
C104.5	Explain the fundamentals of different alternative sources of energy, the generation processes and batteries.		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C104.1	3	1	2	3	2	-	-	-	2	-	3	3	-	-
C104.2	3	2	3	2	2	-	-	-	2	-	2	3	-	-
C104.3	3	3	2	2	2	-	-	-	1	-	-	2	-	-
C104.4	2	3	3	2	3	-	-	-	1	-	3	3	-	-
C104.5	3	2	3	2	3	-	-	-	2	-	2	3	-	-
Total	14	11	13	11	12	-	-	-	8	-	10	14	-	-
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	5	-	4	5	-	-
Average	2.80	2.20	2.60	2.20	2.40	-	-	-	1.60	-	2.00	2.80	-	-
Round (Average)	3	3	3	2	2	-	-	-	2	-	2	3	-	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	BS8161	Semester :	I
Subject Name :	Physics and Chemistry Laboratory		
Course Outcome			
C108.1	Ability to explain the young's modulus by non uniform bending and rigidity modulus by torsion pendulum.		
C108.2	Ability to comprehend the compressibility of given liquid using ultrasonic interferometer and wavelength of mercury spectrum.		
C108.3	Ability to estimate the thickness of thin materials by air wedge method. and Ability to estimate the strength of ferrous solution by potentiometric titration		
C108.4	Ability to estimate the strength of acid by conductometry and PHmetry		
C108.5	Able to estimate water quality parameters.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C108.1	3	2	2	3	3	-	-	-	-	-	-	1	-	-
C108.2	3	2	2	2	3	-	-	-	-	-	-	1	-	-
C108.3	1	1	1	1	1	-	-	-	-	-	-	1	-	-
C108.4	2	2	2	2	2	-	-	-	-	-	-	1	-	-
C108.5	2	2	2	2	2	-	-	-	-	-	-	1	-	-
Total	11	9	9	10	11	-	-	-	-	-	-	5	-	-
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	5	-	-
Average	2.20	1.80	1.80	2.20	2.20	-	-	-	-	-	-	1.00	-	-
Round (Average)	2	2	2	2	2	-	-	-	-	-	-	1	-	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping Second Semester

Subject Code :	HS 8251	Semester :	II
Subject Name :	Technical English		
Course Outcome			
C109.1	Read technical texts and write area specific texts effortlessly.		
C109.2	Listen and comprehend lectures and talks in their areas of specialization and write effectively for a variety of professional and social settings.		
C109.3	Speak and write appropriately and effectively in varied formal and informal contexts.		
C109.4	Write effectively and persuasively and produce different types of writing such as letters, minutes, reports and winning job applications.		
C109.5	Communicate clearly using technical vocabulary in their professional correspondences.		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C109.1	3	2	-	-	-	1	-	-	-	-	1	2	3	2
C109.2	3	2	-	2	-	1	-	-	-	-	1	-	3	3
C109.3	3	2	2	-	2	1	-	-	-	-	1	2	2	3
C109.4	3	2	2	2	-	1	-	-	-	-	1	1	2	3
C109.5	3	2	2	-	1	1	-	-	-	-	1	-	3	3
Total	15	10	6	4	3	5	-	-	-	-	5	5	13	15
No. of COs Mapping with Pos	5	5	3	2	2	5	-	-	-	-	5	3	5	5
Average	3	2	1.2	0.8	.6	1	-	-	-	-	1	1	2.6	3
Round (Average)	3	2	1	1	1	1	-	-	-	-	1	1	3	3



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	PH8252	Semester :	II
Subject Name :	PHYSICS FOR INFORMATION SCIENCE		
Course Outcome			
C111.1	Distinguish conductor, Semiconductors and insulators based on classical and quantum theories		
C111.2	Explain electronic structure transport properties and carrier mechanism in semiconductors		
C111.3	Develop understanding of the fundamentals of magnetic materials, their classifications and application in data storage devices.		
C111.4	Understand the optical properties of materials and applications of these properties in fabrication of modern optical and electro-optical devices		
C111.5	Interpret how the properties of Nano-objects depend on confining electron waves, and how this can be exploited.		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C111.1	2	1	1	-	-	-	-	-	-	-	-	1	-	-
C111.2	2	1	1	-	-	-	-	-	-	-	-	1	-	-
C111.3	2	1	1	-	-	-	-	-	-	-	-	1	-	-
C111.4	2	1	1	-	-	-	-	-	-	-	-	1	-	-
C111.5	2	1	1	-	-	-	-	-	-	-	-	1	-	-
Total	10	5	5	-	-	-	-	-	-	-	-	5	-	-
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	-	-
Average	2	1	1	-	-	-	-	-	-	-	-	1	-	-
Round (Average)	2	1	1	-	-	-	-	-	-	-	-	1	-	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping Third Semester

Subject Code :	MA8351	Semester :	III
Subject Name :	DISCRETE MATHEMATICS		
Course Outcome			
C201.1	Understand how to solve the given standard partial differential equations		
C201.2	Solve differential equations using Fourier series analysis which plays a vital role in engineering applications		
C201.3	Appreciate the physical significance of Fourier series techniques in solving one and two dimensional heat flow problems and one dimensional wave equations.		
C201.4	Understand the mathematical principles on transforms and partial differential equations would provide them the ability to formulate and solve some of the physical problems of engineering.		
C201.5	Use the effective mathematical tools for the solutions of partial differential equations by using Z transform techniques for discrete time systems		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C201.1	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.2	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.3	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.4	3	3	3	1	-	-	-	-	1	-	-	-	3	-
C201.5	3	3	3	1	-	-	-	-	1	-	-	-	3	-
Total	15	15	15	5	-	-	-	-	5	-	-	-	15	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	-	-	-	-	-
Average	3.00	3.00	3.00	1.00	-	-	-	-	2.00	-	-	-	3.00	-
Round (Average)	3	3	3	1	-	-	-	-	2	-	-	-	3	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8391	Semester :	III
Subject Name :	DATA STRUCTURES		
Course Outcome			
C203.1	Implement abstract data types for linear data structures and to apply list ADT.		
C203.2	Apply the linear data structures, stack and queue, to solve real-world problems.		
C203.3	Apply the Tree ADT to solve the various problems.		
C203.4	Apply the different traversal techniques of Graph ADT in solving problems in different domains.		
C203.5	Handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures.		

C203	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C203.1	3	2	3	-	-	-	-	-	-	-	-	-	3	3
C203.2	3	3	3	-	-	-	-	-	-	-	-	-	2	2
C203.3	3	2	3	-	-	-	-	-	-	-	-	-	2	2
C203.4	3	3	3	-	-	-	-	-	-	-	-	-	3	3
C203.5	3	2	2	1	-	1	-	-	2	2	-	2	1	1
No. of COs Mapping with Pos														
Average	3.00	2.40	2.8	1	-	1	-	-	2.00	2.00	-	2.00	2.33	2.00
Round (Average)	3.00	2.00	3.00	1.00	-	1.00	-	-	2.00	2.00	-	2.00	2.00	2.00



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8392	Semester :	III
Subject Name :	OBJECT ORIENTED PROGRAMMING		
Course Outcome			
C204.1	Develop Java programs using OOP Principles		
C204.2	Develop Java programs with the concepts inheritance and interfaces		
C204.3	Build Java applications using exceptions and I/O streams		
C204.4	Develop Java applications with threads and generics classes		
C204.5	Develop interactive Java programs using swings		

CO	PO1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PSO 2
C204.1	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.2	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.3	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.4	2	1	1	-	-	-	-	-	-	-	-	-	2	2
C204.5	2	1	1	-	-	-	-	-	-	-	-	-	2	2
Total	12	6	6										10	10
No. of COs Mapping with Pos	5	5	5										5	5
Average	2.4	1.2	1.2										2	2
Round (Average)	2	1	1										2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8381	Semester :	III
Subject Name :	DATA STRUCTURES LABORATORY		
Course Outcome			
C206.1	Write functions to implement linear and non-linear data structure operations.		
C206.2	Suggest appropriate linear / non-linear data structure operations for solving a given problem.		
C206.3	Appropriately use the linear / non-linear data structure operations for a given problem.		
C206.4	Apply appropriate hash functions that result in a collision free scenario for data storage and retrieval.		
C206.5	Handle searching and sorting operations on various data structures. Choose suitable data structures to handle real time applications in an efficient manner		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C206.1	1	2	3	-	-	-	-	1	1	1	-	1	-	1
C206.2	2	3	3	-	-	-	-	1	2	1	-	2	1	2
C206.3	2	2	3	-	-	-	-	1	2	1	-	2	1	2
C206.4	2	3	2	-	2	-	-	2	3	2	-	3	2	2
C206.5	2	2	2	-	2	2	-	1	2	2	-	3	1	-
No. of COs Mapping with Pos	5	5	5	-	4	1	5	5	5	5	5	5	5	5
Average	1.8	2.4	2.6	-	2	2	-	1.2	3	1.4	-	2.2	1	1.4
Round (Average)	2.0	2.0	3.0	-	2.0	2.0	-	1.0	3.0	1.0	-	2.0	1	1.0



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8383	Semester :	III
Subject Name :	OBJECT ORIENTED PROGRAMMING LABORATORY		
Course Outcome			
C207.1	Develop and implement Java programs for simple applications that make use of classes, packages		
C207.2	Develop and implement Java programs for simple applications that make use of Interfaces, Collections		
C207.3	Develop and implement Java programs for simple applications that make use of exceptions handling, multithreading		
C207.4	Develop applications by incorporating file processing utilities		
C207.5	Develop applications using generic programming and GUI		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C207.1	3	2	3		3	-	-	-	-	-	-	-	2	2
C207.2	3	2	3		3	-	-	-	-	-	-	-	2	2
C207.3	3	2	3		3	-	-	-	-	-	-	-	2	2
C207.4	3	2	2		3	-	-	-	-	-	-	-	3	2
C207.5	3	2	2		3	-	-	-	-	-	-	-	2	2
Total	15	10	13		15	-	-	-	-	-	-	-	11	10
No. of COs Mapping with Pos	5	5	5		5	-	-	-	-	-	-	-	5	5
Average	3	2	2.6		3	-	-	-	-	-	-	-	2.1	2
Round (Average)	3	2	3		3	-	-	-	-	-	-	-	2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	HS8381	Semester :	III
Subject Name :	INTERPERSONAL SKILLS/LISTENING AND SPEAKING		
Course Outcome			
C209.1	Listen and respond appropriately		
C20921	Participate in group discussions		
C209.3	Make effective presentations		
C209.4	Participate confidently and appropriately in conversations both formal and informal		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C209.1	3	1	2	1	-	-	-	-	1	-	-	1	3	2
C20921	3	1	2	1	-	-	-	-	1	-	-	1	3	2
C209.3	3	1	2	1	-	-	-	-	1	-	-	1	3	2
C209.4	3	1	2	1	-	-	-	-	1	-	-	1	3	2
Total	12	4	8	4	-	-	-	-	4	-	-	4	12	8
No. of COs Mapping with Pos	4	4	4	4	-	-	-	-	4	-	-	4	4	4
Average	3	1	2	1	-	-	-	-	1	-	-	1	3	2
Round (Average)	3	1	2	1	-	-	-	-	1	-	-	1	3	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping Fourth Semester

Subject Code :	MA8391	Semester :	IV
Subject Name :	PROBABILITY AND STATISTICS		
Course Outcome			
C210.1	Explain the basic concepts of Random variable, discrete and continuous random variables, Moment Generating Function and List out the distributions.		
C210.2	Summarize two dimensional random variables and know the Joint distribution, Marginal distribution and conditional distribution, covariance, correlation and regression, Transformation of two dimensional random variables, Central limit theorem.		
C210.3	Classify the Random processes and explain the concepts of Markov Processes & Poisson Processes.		
C210.4	Solve and analyze the different types of Queueing models, finite and infinite capacity and single, multi server problems.		
C210.5	Formulate the concepts of one & two dimensional random variable, random process and queueing theory.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C210.1	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.2	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.3	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.4	3	3	3	1	-	-	-	-	1	1	-	2	3	-
C210.5	3	3	3	1	-	-	-	-	1	1	-	2	3	-
Total	15	15	15	5	-	-	-	-	5	5	-	10	15	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	5	-	5	-	-
Average	3.00	3.00	3.00	1.00	-	-	-	-	1.00	1.00	-	2.00	3.00	-
Round (Average)	3	3	3	1	-	-	-	-	1.00	1.00	-	2.00	3.00	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8491	Semester :	IV
Subject Name :	COMPUTER ARCHITECTURE		
Course Outcome			
C211.1	Describe the basic structures of a computer system.		
C211.2	Explain the various arithmetic operations for computers.		
C211.3	Analyze pipelined control units and the different types of hazards in the instructions.		
C211.4	Interpret the concepts of parallel processing architecture		
C211.5	Summarize the fundamentals of memory system and the concepts of I/O system		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C211.1	2	1	1	-	-	-	-	-	-	-	-	-	2	-
C211.2	2	1	1	-	-	-	-	-	-	-	-	-	2	-
C211.3	3	2	2	-	-	-	-	-	-	-	-	-	2	2
C211.4	2	1	1	-	-	-	-	-	-	-	-	-	2	-
C211.5	2	1	1	-	-	-	-	-	-	-	-	-	2	-
Total	11	6	6	-	-	-	-	-	-	-	-	-	10	2
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	5	1
Average	2.2	1.2	1.2	-	-	-	-	-	-	-	-	-	2	2
Round (Average)	2	1	1	-	-	-	-	-	-	-	-	-	2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8492	Semester :	IV
Subject Name :	DATABASE MANAGEMENT SYSTEMS		
Course Outcome			
C212.1	Classify the modern and futuristic database applications based on size and complexity		
C212.2	Map ERmodel to Relational model to perform database design effectively.		
C212.3	Write queries using normalization criteria and optimize queries		
C212.4	Compare and contrast various indexing strategies in different database systems		
C212.5	Appraise how advanced databases differ from traditional databases.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C212.1	3	2	3	-	-	-	-	--	-	-	-	-	2	2
C212.2	3	2	3	-	-	-	-	--	-	-	-	-	2	2
C212.3	3	2	3	-	-	-	-	--	-	-	-	-	3	2
C212.4	3	2	2	-	-	-	-	--	-	-	-	-	2	2
C212.5	3	2	2	-	-	-	-	--	-	-	-	-	2	2
Total	15	10	13	-	-	-	-	--	-	-	-	-	11	10
No. of COs Mapping with Pos	5	5	5	-	-	-	-	--	-	-	-	-	5	5
Average	3	2	2.6	-	-	-	-	--	-	-	-	-	2.1	2
Round (Average)	3	2	3	-	-	-	-	--	-	-	-	-	2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CE8403	Semester :	IV
Subject Name :	DESIGN AND ANALYSIS OF ALGORITHMS		
Course Outcome			
C213.1	Interpret the fundamental needs of algorithms in problem solving.		
C213.2	Classify the different algorithm design techniques for problem solving.		
C213.3	Develop algorithms for various computing problems.		
C213.4	Analyze the time and space complexity of various algorithms. Identify the limitations of algorithms in problem solving.		
C213.5	To identify the types of problem, formulate, analyze and compare the efficiency of Algorithms.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C213.1	3	2	-	-	-	-	-	-	-	3	-	-	3	-
C213.2	3	2	-	2	-	-	-	-	-	-	-	2	3	2
C213.3	3	2	2	2	-	2	2	-	-	-	-	-	3	3
C213.4	3	2	2	2	-	2	2	-	-	-	-	-	3	2
C213.5	3	2	-	2	-	-	-	-	-	-	-	-	3	3
Total	15	10	4	8	-	4	4	-	-	3	-	2	15	10
No. of COs Mapping with Pos	5	5	2	4	-	2	2	-	-	1	-	1	5	4
Average	3	2	2	2	-	2	2	-	-	3	-	2	3	2.5
Round (Average)	3	2	2	2	-	2	2	-	-	3	-	2	3	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8493	Semester :	IV
Subject Name :	OPERATING SYSTEMS		
Course Outcome			
C214.1	Analyze various scheduling algorithms.		
C214.2	Understand dead lock, prevention and avoidance algorithms.		
C214.3	Compare and contrast various memory management schemes.		
C214.4	Understand the functionality of file systems.		
C214.5	Perform administrative tasks on Linux Servers.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C214.1	2	1	3	-	-	-	-	-	-	-	-	-	2	2
C214.2	3	1	2	-	-	-	-	-	-	-	-	-	2	2
C214.3	3	1	3	-	-	-	-	-	-	-	-	-	2	2
C214.4	2	1	3	-	-	-	-	-	-	-	-	-	2	2
C214.5	3	2	2	-	-	-	-	-	-	-	-	-	2	2
Total	13	6	13	-	-	-	-	-	-	-	-	-	10	10
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	5	5
Average	2.6	1.2	2.6	-	-	-	-	-	-	-	-	-	2	2
Round (Average)	3	1	3	-	-	-	-	-	-	-	-	-	2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping Fifth Semester

Subject Code :	MA8551	Semester :	V
Subject Name :	ALGEBRA AND NUMBER THEORY		
Course Outcome			
CO1	Apply the basic notations of groups, rings, fields, which will then be used to solve related problems.		
CO2	Explain the fundamental concepts of advanced algebra and their role in modern mathematics and Applied contexts.		
CO3	Demonstrate accurate and efficient use of advanced algebraic techniques.		
CO4	Demonstrate their mastery by solving non-trivial problems related to the concepts, and by proving simple theorems about the statements proven by the texts.		
CO5	Apply integrated approach to number theory and abstract algebra and provide a firm basis for further reading and study in the subject.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
CO1	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO2	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO3	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO4	3	3	3	1	-	-	-	-	1	-	-	-	3	-
CO5	3	3	3	1	-	-	-	-	1	-	-	-	3	-
Total	15	15	15	5	-	-	-	-	5	-	-	-	15	-
No. of COs Mapping with Pos	5	5	5	5	-	-	-	-	5	-	-	-	-	-
Average	3.00	3.00	3.00	1.00	-	-	-	-	1.00	-	-	-	3.00	-
Round (Average)	3	3	3	1	-	-	-	-	1.00	-	-	-	3.00	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8591	Semester :	V
Subject Name :	COMPUTER NETWORKS		
Course Outcome			
C302.1	Identify various layers of network and discuss the functions of physical layer		
C302.2	Discuss how data flows from one node to another node with regard to data link Layer		
C302.3	Explain the different services of network layer		
C302.4	Compare the different transport layer protocols and their applicability based on User requirements		
C302.5	Describe the working of various application layer protocols		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C302.1	3	3	2	-	-	-	-	-	-	-	-	-	1	-
C302.2	3	3	1	-	-	-	-	-	-	-	-	-	1	-
C302.3	3	3	1	-	-	-	-	-	-	-	-	-	1	-
C302.4	3	3	2	-	-	-	-	-	-	-	-	-	2	2
C302.5	3	3	1	-	-	-	-	-	-	-	-	-	1	-
Total	15	15	7	-	-	-	-	-	-	-	-	-	6	2
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	5	1
Average	3	3	1.33	-	-	-	-	-	-	-	-	-	1.2	2
Round (Average)	3	3	1	-	-	-	-	-	-	-	-	-	1	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	IT8501	Semester :	V
Subject Name :	WEB TECHNOLOGY		
Course Outcome			
C304.1	Design simple web pages using markup languages like HTML and XHTML.		
C304.2	Create dynamic web pages using DHTML and java script that is easy to navigate and use.		
C304.3	Program server side web pages that have to process request from client side web pages.		
C304.4	Represent web data using XML and develop web pages using JSP.		
C304.5	Develop various web services and how these web services interact.		

CO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PO	PS	PS
	1	2	3	4	5	6	7	8	9	10	11	12	O1	O2
C304.1	2	1	1	2	3	-	-	-	-	-	-	-	1	-
C304.2	3	2	2	2	3	-	-	-	-	-	-	-	1	-
C304.3	2	1	1	2	3	-	-	-	-	-	-	-	1	-
C304.4	2	1	1	2	3	-	-	-	-	-	-	-	1	-
C304.5	2	1	1	1	2	-	-	-	-	-	-	-	1	-
Total	11	6	6	9	14	-	-	-	-	-	-	-	5	-
No. of COs Mapping with Pos	5	5	5	5	5	-	-	-	-	-	-	-	5	-
Average	2.2	1.2	1.2	1.8	2.8	-	-	-	-	-	-	-	1	-
Round (Average)	2	1	1	2	3	-	-	-	-	-	-	-	1	-



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8494	Semester :	V
Subject Name :	SOFTWARE ENGINEERING		
Course Outcome			
C305.1	Identify the key activities in managing a software project and Compare different process models.		
C305.2	Demonstrate software requirements and analysis		
C305.3	Apply systematic procedure for software design and deployment		
C305.4	Compare and contrast various software testing		
C305.5	Discuss about the software integration and cost effective project management		

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C305.1	3	3	-	-	-	-	-	-	-	-	-	2	3	2
C305.2	3	3	2	2	-	2	3	2	-	-	2	-	3	2
C305.3	3	3	3	3	-	-	3	3	3	3	2	2	3	3
C305.4	3	3	3	3	2	2	3	3	3	3	3	3	3	3
C305.5	3	3	2	1	-	2	3	2	-	-	2	2	3	2
Total	15	15	10	9	2	6	12	10	6	6	9	9	15	12
No. of COs Mapping with POs	5	5	4	4	1	3	4	4	2	2	4	4	5	5
Average	3	3	2.5	2.25	2	2	3	2.5	3	3	2.25	2.25	3	2.4
Round (Average)	5	5	4	4	2	3	5	4	4	4	4	4	5	4



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	OMD553	Semester :	V
Subject Name :	TELEHEALTH TECHNOLOGY		
Course Outcome			
C306.1	Describe the principles of Telemedicine and Health.		
C306.2	Apply various types of telemedical technology in healthcare.		
C306.3	Elaborate data Security and Standards of telemedicine		
C306.4	Discuss the storage and maintenance of patient using mobile telemedicine		
C306.5	Enumerate the telemedical applications.		

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C306.1	3	2	1	-	-	-	-	-	-	-	-	1	1	1
C306.2	3	2	1	1	1	-	-	-	-	1	2	1	2	1
C306.3	3	2	2	1	2	-	-	-	1	-	2	1	2	1
C306.4	3	2	2	2	2	-	-	-	1	-	-	1	1	1
C306.5	2	2	2	2	2	-	-	-	-	-	-	1	2	1
Total	14	10	8	6	7				2	1	4	5	8	5
No. of COs Mapping with Pos	5	5	5	4	4		-		2	1	2	5	5	5
Average	2.8	2.0	1.6	1.5	1.7	0.0	0.0	0-0	1.0	1.0	2.0	1.0	1.6	1.1
Round (Average)	3	2	2	2	2	0	0	0	1	1	2	1	2	1



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8592	Semester :	VI
Subject Name :	OBJECT ORIENTED ANALYSIS AND DESIGN		
Course Outcome			
C311.1	Express the software design concepts with UML diagram.		
C311.2	Construct the domain model and design model to various use case scenarios		
C311.3	Design software applications using object oriented concepts.		
C311.4	Transform UML based software design into pattern based design using design patterns.		
C311.5	Explain the various testing methodologies for object oriented software.		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C311.1	2	1	1	-	-	-	-	-	-	-	-	-	1	1
C311.2	3	2	2	-	-	-	-	-	-	-	-	-	1	1
C311.3	3	2	2	-	-	-	-	-	-	-	-	-	3	3
C311.4	3	2	2	-	-	-	-	-	-	-	-	-	2	2
C311.5	2	1	1	-	-	-	-	-	-	-	-	-	3	3
Total	13	8	8	-	-	-	-	-	-	-	-	-	10	10
No. of COs Mapping with Pos	5	5	5	-	-	-	-	-	-	-	-	-	5	5
Average	2.6	1.6	1.6	-	-	-	-	-	-	-	-	-	2.0	2.0
Round (Average)	3.0	2.0	2.0	-	-	-	-	-	-	-	-	-	2.0	2.0



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8092	Semester :	VI
Subject Name :	COMPUTER GRAPHICS AND MULTIMEDIA		
Course Outcome			
C314.1	Design two dimensional graphics		
C314.2	Apply two dimensional transformations		
C314.3	Design three dimensional graphics		
C314.4	Understood Different types of Multimedia File Format		
C314.5	Design Basic 3d Scenes using Blender		

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C314.1	3	2	1	-	-	-	-	-	-	-	-	-	3	2
C314.2	3	2	1	-	-	-	-	-	-	-	-	-	3	2
C314.3	3	2	2	-	-	-	-	-	-	-	-	-	3	2
C314.4	3	2	2	-	-	-	-	-	1	-	-	-	3	2
C314.5	3	2	1	-	-	1	-	-	-	-	-	-	3	2
TOTAL	15	10	7	-	-	1	-	-	1	-	-	-	15	10
No. of COs Mapping with POs	5	5	5	-	-	1	-	-	1	-	-	-	5	5
Average	3	2	1.4	-	-	1	-	-	1	-	-	-	3	2
Round (Average)	3	2	1	-	-	1	-	-	1	-	-	-	3	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8662	Semester :	VI
Subject Name :	MOBILE APPLICATION DEVELOPMENT LABORATORY		
Course Outcome			
C315.1	Build a mobile application using GUI components and Layout using Mobile application development frame work		
C315.2	Develop mobile applications using Event Listener.		
C315.3	Develop mobile applications using Databases		
C315.4	Develop mobile applications using RSS Feed, Internal/External Storage, SMS, Multithreading and GPS		
C315.5	Design and Implement various mobile applications using emulators.		

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C315.1	3	3	2	-	3	-	-	-	-	-	-	-	3	2
C315.2	3	3	2	-	2	-	-	-	-	-	-	-	3	2
C315.3	3	3	2	-	2	-	-	-	-	-	-	-	2	3
C315.4	3	3	2	-	3	-	-	-	-	-	-	-	3	2
C315.5	3	3	2	-	2	-	-	-	-	-	-	-	3	3
TOTAL	15	15	10	-	12	-	-	-	-	-	-	-	14	12
No. of COs Mapping with POs	5	5	5	-	5	-	-	-	-	-	-	-	5	5
Average	3	3	2	-	2.4	-	-	-	-	-	-	-	2.8	2.4
Round (Average)	5	5	4	-	4	-	-	-	-	-	-	-	5	4



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	HS8581	Semester :	VI
Subject Name :	PROFESSIONAL COMMUNICATION		
Course Outcome			
C318.1	Make effective presentations		
C318.2	Participate confidently in Group Discussions.		
C318.3	Attend job interviews and be successful in them.		
C318.4	Develop adequate Soft Skills required for the workplace		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C318.1	-	-	-	-	-	-	-	1	2	3	1	1	1	2
C318.2	-	-	-	-	-	-	-	2	3	3	2	1	2	1
C318.3	-	-	-	-	-	-	-	2	3	2	-	1	2	-
C318.4	-	-	-	-	-	-	-	1	1	3	2	2	1	2
Total	-	-	-	-	-	-	-	6	9	11	5	5	6	5
No. of COs Mapping with Pos	-	-	-	-	-	-	-	4	4	4	3	4	4	3
Average	-	-	-	-	-	-	-	1.5	2.25	2.75	1.67	1.25	1.5	1.67
Round (Average)	-	-	-	-	-	-	-	2	2	3	2	1	2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	CS8079	Semester :	VII
Subject Name :	HUMAN COMPUTER INTERACTION		
Course Outcome			
C405.1	Competent to design effective dialog for HCI		
C405.2	Apply an interactive design process and universal design principles in designing HCI systems		
C405.3	Explain the HCI implications for designing multimedia/ ecommerce/ e-learning Web sites.		
C405.4	Develop meaningful user interface		
C405.5	How cognition and perception, which encompass attention, memory, thought, the “senses” play a role in affecting the experience of interactive design		

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C405.1	3	3	2	-	2	-	-	-	-	-	-	-	1	2
C405.2	2	3	3	1	2	3	-	-	-	-	-	-	3	2
C405.3	1	2	-	2	-	2	-	1	-	1	-	-	2	2
C405.4	3	3	3	2	2	2	-	-	1	-	2	-	1	2
C405.5	3	3	2	1	2	2	1	-	-	-	-	-	3	2
Total	12	14	10	6	8	9	1	1	1	1	2	0	10	10
No. of COs Mapping with POs	5	5	4	4	4	4	2	2	2	2	2	0	5	5
Average	4.14	4.71	4.00	2.67	3.33	3.67	1.33	1.33	1.33	1.33	2.00	0.00	3.57	3.57
Round (Average)	4	5	4	3	4	4	1	1	1	1	2	0	4	4



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	IT8761	Semester :	VII
Subject Name :	SECURITY LABORATORY		
Course Outcome			
C407.1	Develop code for classical Encryption Techniques to solve the problems.		
C407.2	Build cryptosystems by applying symmetric and public key encryption algorithms.		
C407.3	Construct code for authentication algorithms.		
C407.4	Develop a signature scheme using Digital signature standard.		
C407.5	Demonstrate the network security system using open source tools		

CO	PO 1	PO2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C407.1	3	3	3	-	2	-	-	2	1	2	-	2	2	2
C407.2	3	3	3	-	2	-	-	2	1	1	-	2	1	2
C407.3	3	3	2	-	3	-	-	3	2	2	-	3	3	1
C407.4	3	3	2	-	3	-	-	3	2	2	-	3	2	1
C407.5	3	3	2	-	3	-	-	2	2	1	-	2	2	2
Total	15	15	12	-	13	-	-	12	8	8		12	10	8
No. of COs Mapping with Pos	5	5	5	-	5	-	-	5	5	5	-	5	5	5
Average	3.00	3.00	2.33	-	2.67	-	-	2.33	1.67	1.67	-	2.33	2	1.67
Round (Average)	3	3	2	-	3	-	-	2	2	2	-	2	2	2



ST. JOSEPH COLLEGE OF ENGINEERING

Near Toll Sriperumbudur, Chennai 602117
Approved by AICTE New Delhi | Affiliated to Anna University | An ISO9001:
2015 Certified Institution



Course Outcome-CO-PO Mapping

Subject Code :	IT8811	Semester :	VIII
Subject Name :	PROJECT WORK		
Course Outcome			
C410.1	Identify technically and economically feasible problems of social relevance		
C410.2	Plan and build the project team with assigned responsibilities		
C410.3	Identify and survey the relevant literature for getting exposed to related solutions		
C410.4	Analyze, design and develop adaptable and reusable solutions of minimal complexity by using modern tools		
C410.5	Implement and test solutions to trace against the user requirements, Deploy and support the solutions for better manageability of the solutions and provide scope for improvability		

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2
C410.1	3	2	2	1	-	2	2	2	2	2	2	1	1	1
C410.2	3	3	3	3	2	2	2	2	2	2	2	1	2	2
C410.3	3	3	3	2	2	2	2	2	2	2	2	1	2	2
C410.4	3	3	3	3	2	2	2	2	2	2	2	1	2	2
C410.5	3	3	3	2	2	2	2	2	2	2	2	1	2	2
Total	15	14	14	11	8	10	10	10	10	10	10	5	9	9
No. of COs Mapping with Pos	5	5	5	5	4	5	5	5	5	5	5	5	5	5
Average	3	2.8	2.8	2.2	2	2	2	2	2	2	2	1	1.8	1.8
Round (Average)	3	3	3	2	2	2	2	2	2	2	2	1	2	2