



# NPR College of Engineering & Technology

NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.  
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

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## CRITERION 2 - TEACHING-LEARNING AND EVALUATION

### KEY INDICATOR 2.6 STUDENT PERFORMANCE AND LEARNING OUTCOMES

Metric No 2.6.2 Attainment of Programme Outcomes and Course Outcomes are evaluated by the Institution.

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PRINCIPAL  
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# **Academic Year 2019 -20**



### 1. Program Outcomes (PO) for Computer Science and Engineering

PO1	<b>Engineering knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
PO2	<b>Problem analysis:</b> Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
PO3	<b>Design/development of solutions:</b> 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.
PO4	<b>Conduct investigations of complex problems:</b> 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.
PO5	<b>Modern tool usage:</b> 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.
PO6	<b>The engineer and society:</b> 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.
PO7	<b>Environment and sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	<b>Ethics:</b> Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.



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PO9	<b>Individual and team work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	<b>Project management and finance:</b> 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.
PO12	<b>Life Long Learning:</b> 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.



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## 2. Program Specific Outcomes (PSO) for Computer Science and Engineering

At the end of the program students will be able to

<p align="center"><b>PSO1</b></p>	<p>Deal with real time problems by understanding the evolutionary changes in computing, applying standard practices and strategies in software project development using open-ended programming environments.</p>
<p align="center"><b>PSO2</b></p>	<p>Employ modern computer languages, environments and platforms in creating innovative career paths by inculcating moral values and ethics.</p>
<p align="center"><b>PSO3</b></p>	<p>Achieve additional expertise through add-on and certificate programs.</p>



  
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### 3. List of courses for the regulation 2013 (2016 – 2020 Batch)

SL. NO.	COURSE CODE	SUBJECT CODE	TITLE OF THE SUBJECT
<b>1<sup>st</sup> Semester</b>			
1.	C101	HS6151	Technical English – I
2.	C102	MA6151	Mathematics – I
3.	C103	PH6151	Engineering Physics – I
4.	C104	CY6151	Engineering Chemistry – I
5.	C105	GE6151	Computer Programming
6.	C106	GE6152	Engineering Graphics
7.	C107	GE6161	Computer Practices Laboratory
8.	C108	GE6162	Engineering Practices Laboratory
9.	C109	GE6163	Physics and Chemistry Laboratory – I
<b>2<sup>nd</sup> Semester</b>			
10.	C110	HS6251	Technical English – II
11.	C111	MA6251	Mathematics – II
12.	C112	PH6251	Engineering Physics – II
13.	C113	CY6251	Engineering Chemistry – II
14.	C114	CS6201	Digital Principles and System Design
15.	C115	CS6202	Programming and Data Structures I
16.	C116	GE6262	Physics and Chemistry Laboratory - II
17.	C117	CS6211	Digital Laboratory
18.	C118	CS6212	Programming and Data Structures Laboratory I





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3 <sup>rd</sup> Semester			
19.	C201	MA6351	Transforms and Partial Differential Equations
20.	C202	CS6301	Programming and Data Structure II
21.	C203	CS6302	Database Management Systems
22.	C204	CS6303	Computer Architecture
23.	C205	CS6304	Analog and Digital Communication
24.	C206	GE6351	Environmental Science and Engineering
25.	C207	CS6311	Programming and Data Structure Laboratory II
26.	C208	CS6312	Database Management Systems Laboratory
4 <sup>th</sup> Semester			
27.	C209	MA6453	Probability and Queuing Theory
28.	C210	CS6551	Computer Networks
29.	C211	CS6401	Operating Systems
30.	C212	CS6402	Design and Analysis of Algorithms
31.	C213	EC6504	Microprocessor and Microcontroller
32.	C214	CS6403	Software Engineering
33.	C215	CS6411	Networks Laboratory
34.	C216	CS6412	Microprocessor and Microcontroller Laboratory
35.	C217	CS6413	Operating Systems Laboratory
5 <sup>th</sup> Semester			
36.	C301	MA6566	Discrete Mathematics
37.	C302	CS6501	Internet Programming
38.	C303	CS6502	Object Oriented Analysis and Design
39.	C304	CS6503	Theory of Computation
40.	C305	CS6504	Computer Graphics
41.	C306	CS6511	Case Tools Laboratory
42.	C307	CS6512	Internet Programming Laboratory
43.	C308	CS6513	Computer Graphics Laboratory





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6 <sup>th</sup> Semester			
44.	C309	CS6601	Distributed Systems
45.	C310	IT6601	Mobile Computing
46.	C311	CS6660	Compiler Design
47.	C312	IT6502	Digital Signal Processing
48.	C313	CS6659	Artificial Intelligence
49.	C314	GE6757	Total Quality Management
50.	C316	CS6611	Mobile Application Development Laboratory
51.	C317	CS6612	Compiler Laboratory
52.	C318	GE6674	Communication and Soft Skills – Laboratory Based
7 <sup>th</sup> Semester			
53.	C401	CS6701	Cryptography and Network Security
54.	C402	CS6702	Graph Theory and Applications
55.	C403	CS6703	Grid and Cloud Computing
56.	C404	CS6704	Resource Management Techniques
57.	C405	IT6801	Service Oriented Architecture
58.	C406	CS6007	Information Retrieval
59.	C407	CS6711	Security Laboratory
60.	C408	CS6712	Grid and Cloud Computing Laboratory
8 <sup>th</sup> Semester			
61.	C409	CS6801	Multi – Core Architectures and Programming
62.	C410	CS6008	Human Computer Interaction
63.	C411	GE6075	Professional Ethics In Engineering
64.	C412	CS6811	Project Work





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#### 4. List of Course Outcomes (Regulation 2013) for CSE

### SEMESTER 1

Course Code & Name : C101 & HS6151 - Technical English - I		
	CO Statements	Knowledge Level
The students should be able to		
C101.1	<b>Understand</b> clearly, confidently, comprehensibly, and communicate with one or many listeners using appropriate communicative strategies.	K2
C101.2	<b>Construct</b> cohesively and coherently and flawlessly avoiding grammatical errors, using a wide vocabulary range, organizing their ideas logically on a topic.	K6
C101.3	<b>Organize</b> different genres of texts adopting various reading strategies.	K6
C101.4	<b>Distinguish</b> and comprehend different spoken discourses/excerpts in different accents.	K2
C101.5	<b>Listen</b> to different accents, speeches and presentations.	K2

Course Code & Name : C102 & MA6151 - Mathematics - I		
	CO Statements	Knowledge Level
The students should be able to		
C102.1	<b>Learn</b> a clear idea of matrix algebra pertaining eigen values and eigen vectors in addition dealing with quadratic forms.	K2
C102.2	<b>Learn</b> infinite series and their convergence and acquire the knowledge of with limitations of using infinite series approximations for solutions arising in mathematical modelling.	K2
C102.3	<b>Understand</b> and characterize phenomena which evolve around circle of curvature and envelope.	K2
C102.4	<b>Extend</b> the function of a one variable to several variables. Multivariable functions of real variables arise inevitable in engineering.	K2
C102.5	<b>Exposed</b> to double and triple integration so that they can handle integrals of higher order which are applied in engineering field.	K3





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## Course Code & Name : C103 & PH6151 - Engineering Physics - I

CO Statements		Knowledge Level
The students should be able to		
C103.1	<b>Describe</b> the crystal structures and various crystal growth techniques.	K1
C103.2	<b>Analyze</b> the elastic nature of materials and thermal behaviour of materials.	K4
C103.3	<b>Apply</b> the knowledge of quantum mechanics and classical mechanics in addressing the problems related to science and technology.	K3
C103.4	<b>Apply</b> the knowledge about designing an auditorium with good acoustical properties and make use of Ultrasonics and its applications in various fields.	K3
C103.5	<b>Illustrate</b> the advantages of optical communication using LASER.	K4

## Course Code & Name : C104 & CY6151 - Engineering Chemistry - I

CO Statements		Knowledge Level
The students should be able to		
C104.1	<b>Describe</b> the methods of polymerization, types, Properties and uses of polymers.	K1
C104.2	<b>Illustrate</b> the concepts of basic thermodynamics and problem solving skills in various disciplines of Engineering.	K4
C104.3	<b>Discuss</b> the laws of photochemistry in recognizing the interaction of light with matter and its applications in luminescence and spectroscopy	K2
C104.4	<b>Review</b> the use of phase rule in identifying its applications in metallurgy and alloys.	K4
C104.5	<b>Summarize</b> the basic knowledge in Nano chemistry and distinguish the existing technology with nanotechnology.	K2

## Course Code & Name : C105 & GE6151 - Computer Programming

CO Statements		Knowledge Level
The students should be able to		
C105.1	<b>Elaborate</b> the organization of digital computer and design the solution for simple computing problems using algorithm, flowchart and pseudo code.	K6
C105.2	<b>Apply</b> the different looping structure to solve simple scientific and statistical problems.	K3
C105.3	<b>Devise</b> the solutions for simple problems using arrays and strings	K6
C105.4	<b>Demonstrate</b> the usage of dynamic memory allocation and pointer variables.	K3





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C105.5	Illustrate the concepts of structure and union with an example programs.	K4
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## Course Code and Name : C106 & GE6152 - Engineering Graphics

CO Statements		Knowledge Level
The students should be able to		
C106.1	<b>Sketch</b> the conic sections, special curves, and draw orthographic views from pictorial views and models.	K4
C106.2	<b>Apply</b> the principles of orthographic projections of points in all quadrants, lines and planes in first quadrant.	K3
C106.3	<b>Sketch</b> the projections of simple solids like prisms, pyramids, cylinder and cone and obtain the traces of plane figures.	K4
C106.4	<b>Practice</b> the sectional views of solids like cube, prisms, pyramids, cylinders & cones and extend its lateral surfaces	K3
C106.5	<b>Sketch</b> the perspective projection of simple solids, truncated prisms, pyramids, cone and cylinders and sketch the isometric projection of simple machine parts.	K4

## Course Code and Name : C107 & GE6161 - Computer Practices Laboratory

CO Statements		Knowledge Level
The students should be able to		
C107.1	<b>Describe</b> the usage of office automation tools	K1
C107.2	<b>Apply</b> the good programming methods for program development.	K3
C107.3	<b>Design</b> and implement the C program for simple application	K4
C107.4	<b>Develop</b> and implement the recursive programs	K4
C107.5	<b>Implement</b> the C program with the help of Structures and Union	K5

## Course Code and Name : C108 & GE6162 - Engineering Practices Laboratory

CO Statements		Knowledge Level
The students should be able to		
C108.1	<b>Construct</b> Electrical and Electronic circuits.	K6
C108.2	<b>Examine</b> different types of electronic circuits and components.	K3
C108.3	<b>Recognize</b> electrical safety rules, grounding, general house wiring.	K6
C108.4	<b>Explore</b> soldering practices.	K3



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Course Code and Name : C109 & GE6163 - Physics and Chemistry Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
<b>C109.1</b>	<b>Apply</b> physics principles of optics and thermal physics to evaluate engineering properties of materials.	<b>K3</b>
<b>C109.2</b>	<b>Perform</b> the quantitative chemical analysis of chloride and dissolved oxygen.	<b>K5</b>
<b>C109.3</b>	<b>Determine</b> the amount of acids by using the instruments of conductivity meter and pH meter.	<b>K5</b>



  
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## SEMESTER 2

### Course Code & Name : C110 & HS6251 - Technical English - II

CO Statements		Knowledge Level
The students should be able to		
C110.1	<b>Speak</b> convincingly, express their opinions clearly, initiate a discussion, negotiate, argue using appropriate communicative strategies..	K2
C110.2	<b>Write</b> effectively and persuasively and produce different types of writing such as narration, description, exposition and argument as well as creative, critical, analytical and evaluative writing.	K5
C110.3	<b>Read</b> different genres of texts, infer implied meanings and critically analyse and evaluate them for ideas as well as for method of presentation.	K1
C110.4	<b>Listen/view</b> and comprehend different spoken excerpts critically and infer unspoken and implied meanings.	K2
C110.5	<b>Read and write</b> effectively for a variety of professional and social settings	K2

### Course Code & Name : C111 & MA6251 - Mathematics - II

CO Statements		Knowledge Level
The students should be able to		
C111.1	<b>Solve</b> ordinary differential equations that model most of the engineering problems .	K3
C111.2	<b>Acquainted</b> with the concepts of vector calculus-like Gradient, Divergence, Curl, Directional derivative, Irrotational vector and Solenoidal vector. The course gives an understanding of Vector integration, needed for problems in all engineering disciplines.	K2
C111.3	<b>Make</b> to appreciate the purpose of using transforms to create new domain in which it is easier to handle the problem that is being investigated.	K6
C111.4	<b>Develop</b> an understanding of the standard techniques of complex variable and mapping so as to enable the student to apply them with confidence, in application areas such as heat conduction, elasticity, fluid dynamics and flow of electric current.	K4
C111.5	<b>Exposed</b> to the concept of Cauchy's integral theorem, Taylor and Laurent expansions, Singular points, Application of residue theorem to evaluate complex integrals.	K3





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Course Code & Name : C112 & PH6251 - Engineering Physics - II		
	CO Statements	Knowledge Level
The students should be able to		
C112.1	<b>Describe</b> the conducting materials and their properties.	K1
C112.2	<b>Analyze</b> the semiconductors and able to differentiate various types of semiconductors.	K4
C112.3	<b>Apply</b> the knowledge of magnetic and superconducting materials for modern day to day applications.	K3
C112.4	<b>Understand</b> the properties and applications of dielectrics.	K6
C112.5	<b>Apply</b> the knowledge about the modern engineering materials for various applications.	K3

Course Code & Name : C113 & CY6251 - Engineering Chemistry - II		
	CO Statements	Knowledge Level
The students should be able to		
C113.1	<b>Describe</b> water technology in the purification of water in domestic and industrial applications.	K1
C113.2	<b>Understand</b> the principles of electrochemistry, the factors affecting corrosion and the prevention of corrosion	K6
C113.3	<b>Classify</b> the different alternative sources of energy and the generation processes.	K3
C113.4	<b>Enumerate</b> the different types of engineering materials and their applications	K3
C113.5	<b>Discuss</b> the industrial techniques of petroleum processing and the determination of calorific values and combustion parameters.	K2

Course Code & Name : C114 & CS6201 - Digital Principles and System Design		
	CO Statements	Knowledge Level
The students should be able to		
C114.1	<b>Analyze</b> different methods used for simplification of Boolean expressions.	K4
C114.2	<b>Use</b> Boolean simplification techniques to design a combinational hardware circuit and write HDL code for circuits.	K3
C114.3	<b>Design</b> and analysis of a given synchronous sequential circuit.	K4
C114.4	<b>Implement</b> an asynchronous sequential circuit design.	K5
C114.5	<b>Design</b> digital circuits using PLD	K4





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Course Code & Name : C115 & CS6202 - Programming and Data Structures I		
	CO Statements	Knowledge Level
The students should be able to		
C115.1	<b>Summarize</b> the concept of arrays and pointers in C language.	K2
C115.2	<b>Illustrate</b> the process of handling files and heterogeneous data types using C programs	K4
C115.3	<b>Discuss</b> about the various Linear Data Structure Operations and applications using ADT	K6
C115.4	<b>Analyze</b> the various algorithms for sorting and searching	K3
C115.5	<b>Demonstrate</b> the indexing techniques in data structures	K4

Course Code & Name : C116 & GE6262 - Physics and Chemistry Laboratory - II		
	CO Statements	Knowledge Level
The students should be able to		
C116.1	<b>Ability</b> to test materials by using their knowledge of applied physics principles in optics and properties of matter.	K5
C116.2	<b>Determine</b> the hardness, alkalinity and metal ion content in the water samples by volumetric titration.	K5
C116.3	<b>Estimate</b> the water quality parameters by potentiometer conduct meter and flame photometer.	K2

Course Code & Name : C117 & CS6211 - Digital Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C117.1	<b>Summarize</b> simplified combinational circuits using basic logic gates	K2
C117.2	<b>Understand</b> combinational circuits using MSI devices	K2
C117.3	<b>Build</b> sequential circuits like registers and counters	K3
C117.4	<b>Construct</b> combinational and sequential circuits using HDL	K3
C117.5	<b>Design</b> and implement simple digital system	K6





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## Course Code & Name : C118 & CS6212 - Programming and Data Structures Laboratory I

CO Statements		Knowledge Level
The students should be able to		
C118.1	<b>Develop</b> simple C Programs using pointers and Functions	K4
C118.2	<b>Develop</b> C program for Linear data structure operations and its applications	K3
C118.3	<b>Apply</b> the File Manipulation concepts	K3
C118.4	<b>Develop</b> programs using various sorting algorithms	K4
C118.5	<b>Develop</b> programs using different searching methods	K4

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## SEMESTER 3

Course Code & Name : C201 & MA6351 - Transforms and Partial Differential Equations		
	CO Statements	Knowledge Level
The students should be able to		
C201.1	<b>Solve</b> Linear Partial differential equations of first and second order.	K3
C201.2	<b>Associate</b> the concepts of Fourier series expansion for even and odd functions.	K2
C201.3	<b>Apply</b> the concepts of Fourier series in solving boundary value problems.	K3
C201.4	<b>Discuss</b> the Fourier transform, Fourier Sine and Cosine transform techniques.	K2
C201.5	<b>Discuss</b> the concepts of Z-Transform techniques for discrete time systems.	K2

Course Code and Name : C202 & CS6301 - Programming and Data Structures II		
	CO Statements	Knowledge Level
The students should be able to		
C202.1	<b>Understand</b> the basic concepts of Object Oriented programming.	K2
C202.2	<b>Apply</b> the concepts of polymorphism, inheritance and virtual functions for problem solutions.	K3
C202.3	<b>Outline</b> the concepts of Exception handling and templates	K6
C202.4	<b>Summarize</b> about tree preliminaries and other tree structures	K2
C202.5	<b>Apply</b> the non-linear data structure graph in solving the real world problems.	K3

Course Code and Name : C203 & CS6302 - Database Management System		
	CO Statements	Knowledge Level
The students should be able to		
C203.1	<b>Explore</b> the basic concepts of Database Management system.	K6
C203.2	<b>Create</b> database using query languages.	K6
C203.3	<b>Apply</b> concurrency control & recovery mechanism for database problems.	K2
C203.4	<b>Explore</b> and gain the knowledge on internal storage Structure and indexing techniques.	K6
C203.5	<b>Relate</b> security concepts to databases.	K6



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Course Code and Name : C205 & CS6304 - Analog and Digital Communication		
	CO Statements	Knowledge Level
The students should be able to		
C205.1	<b>Apply</b> analog communication techniques.	K2
C205.2	<b>Apply</b> digital communication techniques.	K2
C205.3	<b>Use</b> data and pulse communication techniques.	K3
C205.4	<b>Analyze</b> Source and Error control coding.	K3
C205.5	<b>Utilize</b> multi-user radio communication.	K3

Course Code and Name : C204 & CS6303 - Computer Architecture		
	CO Statements	Knowledge Level
The students should be able to		
C204.1	<b>Describe</b> the computer organization components, instructions and addressing modes	K1
C204.2	<b>Model</b> arithmetic and logic unit including Floating Point Multiplication and Division Algorithms.	K6
C204.3	<b>Develop</b> MIPS architecture by building pipelined data path and control path.	K4
C204.4	<b>Analyze</b> pipelined control units with Instruction Level Parallelism	K4
C204.5	<b>Classify</b> the performance of different Memory and Input-Output systems.	K3

Course Code and Name : C206 & GE6351 - Environmental Science and Engineering		
	CO Statements	Knowledge Level
The students should be able to		
C206.1	<b>Summarize</b> the importance of public awareness on environment and nature of biodiversity	K2
C206.2	<b>Describe</b> the various causes, effect and control measures of environmental pollution.	K1
C206.3	<b>Discuss</b> the human development that leads to environmental disasters, the value of natural resources and their conservation.	K2
C206.4	<b>Understand</b> the value of public participation in environmental protection, Environmental Management and Legislation Acts and sustainable development.	K6
C206.5	<b>Review</b> the problems related to population and their remedial measures.	K5



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Course Code and Name : C207 & CS6311 - Programming and Data Structure Laboratory II		
	CO Statements	Knowledge Level
The students should be able to		
C207.1	<b>Develop</b> C++ programs using the concepts of abstraction, encapsulation, constructor, polymorphism, overloading and inheritance for solving problems.	<b>K4</b>
C207.2	<b>Design</b> and implement C++ programs for manipulating stacks, queues, linked list, trees and graphs.	<b>K4</b>
C207.3	<b>Develop</b> C++ programs for handling exceptions.	<b>K4</b>
C207.4	<b>Apply</b> the different data structures for realizing solutions to practical problems.	<b>K3</b>
C207.5	<b>Develop</b> recursive programs using trees and graphs.	<b>K4</b>

Course Code and Name : C208 & CS6312 - Database Management Systems Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C208.1	<b>Infer</b> database language commands to create simple database	<b>K4</b>
C208.2	<b>Analyze</b> the database using queries to retrieve records	<b>K6</b>
C208.3	<b>Applying</b> PL/SQL for processing database	<b>K6</b>
C208.4	<b>Analyze</b> front end tools to design forms, reports and menus	<b>K5</b>
C208.5	<b>Develop</b> solutions using database concepts for real time requirements.	<b>K4</b>



  
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## SEMESTER 4

### Course Code and Name : C209 & MA6453 - Probability and Queuing Theory

	CO Statements	Knowledge Level
The students should be able to		
C209.1	<b>Identify</b> the functions of discrete and continuous random variables, moments and moment generating function	K1
C209.2	<b>Solve</b> problems in marginal conditional distribution, using the concepts of correlation, regressions and transformation of two dimensional random variables.	K3
C209.3	<b>Determine</b> the process is either SSS or WSS, find the TPM of Markov chain and its classifications.	K5
C209.4	<b>Analyze</b> the concepts of queuing models	K4
C209.5	<b>Apply</b> non Markovian queues to open and closed networks.	K3

### Course Code and Name : C210 & CS6551 - Computer Networks

	CO Statements	Knowledge Level
The students should be able to		
C210.1	<b>Describe</b> the Network fundamentals and terminology	K1
C210.2	<b>Recognize</b> the different internetworking devices and their functions	K6
C210.3	<b>Demonstrate</b> various types of routing techniques	K6
C210.4	<b>Outline</b> the mechanisms involved in transport layer	K6
C210.5	<b>Analyze</b> the features and operations of various application layer protocols such as HTTP, DNS, and SMTP.	K4

### Course Code and Name : C211 & CS6401 - Operating System

	CO Statements	Knowledge Level
The students should be able to		
C211.1	<b>Summarize</b> the basic concepts, System call, structure and functions of Operating Systems.	K2
C211.2	<b>Design</b> the various Scheduling algorithms, Deadlock prevention, Deadlock avoidance algorithms and apply the principles of concurrency.	K4
C211.3	<b>Demonstrate</b> the usage of various memory management schemes.	K3
C211.4	<b>Encapsulate</b> the concepts of Mass Storage Structure, File System Structure and I/O Systems.	K6
C211.5	<b>Implement</b> administrative tasks on Linux servers	K5





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## Course Code and Name : C212 & CS6402 - Design and Analysis of Algorithm

CO Statements		Knowledge Level
The students should be able to		
C212.1	<b>Describe</b> the fundamentals of algorithmic problem solving and able to analyse recursive and non-recursive algorithms.	K1
C212.2	<b>Design</b> algorithms for various computing problems using brute force and divide-and conquer technique.	K4
C212.3	<b>Analyze</b> the time and space complexity of various algorithms using dynamic programming and greedy technique.	K4
C212.4	<b>Analyze</b> the different algorithm design techniques for a given problem using iterative improvement.	K4
C212.5	<b>Modify</b> existing algorithms to improve efficiency.	K3

## Course Code and Name : C213 & EC6504 - Microprocessor and Microcontroller

CO Statements		Knowledge Level
The students should be able to		
C213.1	<b>Design</b> and implement programs on 8086 microprocessor.	K3
C213.2	<b>Extend</b> system bus structure of 8086 microprocessor.	K2
C213.3	<b>Design</b> I/O circuits.	K3
C213.4	<b>Design</b> Memory Interfacing circuits.	K3
C213.5	<b>Design</b> and implement 8051 microcontroller based systems	K3

## Course Code and Name : C214 & CS6403 - Software Engineering

CO Statements		Knowledge Level
The students should be able to		
C214.1	<b>Describe</b> the purpose and facts of different software development process models and project management	K1
C214.2	<b>Identify</b> the functional and non-functional requirements for software development by preparing IEEE Software Requirements Document.	K1
C214.3	<b>Express</b> software design activities using data flow diagrams and architectural diagrams.	K6
C214.4	<b>Develop</b> a testing framework by understanding the purposes and stages of software testing and test-driven development.	K4
C214.5	<b>Create</b> the project management activities involved in developing a framework including planning, scheduling, risk assessment/management.	K6





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## Course Code and Name : C215 & CS6411 - Networks Laboratory

CO Statements		Knowledge Level
The students should be able to		
C215.1	<b>Demonstrate</b> the socket program using TCP & UDP	K1
C215.2	<b>Develop</b> simple applications using TCP & UDP	K5
C215.3	<b>Develop</b> the code for Data link layer protocol simulation	K4
C215.4	<b>Examine</b> the performances of Routing protocol	K5
C215.5	<b>Experiment</b> with congestion control algorithm using network simulator	K5

## Course Code and Name : C216 & CS6412 - Microprocessor and Microcontroller Laboratory

CO Statements		Knowledge Level
The students should be able to		
C216.1	<b>Develop</b> an ALP for fixed and Floating Point and Arithmetic	K3
C216.2	<b>Develop</b> an ALP for Interface different I/O s with processor	K3
C216.3	<b>Develop</b> an ALP to Generate waveforms using Microprocessors	K3
C216.4	<b>Develop</b> an ALP using 8051 microcontroller	K3
C216.5	<b>Understand</b> the difference between simulator and Emulator	K2

## Course Code and Name : C217 & CS6413 - Operating Systems Laboratory

CO Statements		Knowledge Level
The students should be able to		
C217.1	<b>Use</b> the basics of shell programming.	K3
C217.2	<b>Use</b> the System calls and implement in C programming.	K3
C217.3	<b>Apply</b> the file system related system calls.	K3
C217.4	<b>Identify</b> the performance of various page replacement algorithms	K6
C217.5	<b>Develop</b> algorithm for deadlock avoidance, detection and file allocation strategies	K5



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## SEMESTER 5

Course Code and Name : C301 & MA6566 - Discrete Mathematics		
	CO Statements	Knowledge Level
The students should be able to		
C301.1	<b>Summarize</b> the concept of elementary mathematical logical arguments.	K2
C301.2	<b>Apply</b> basic counting techniques to solve combinatorial problems.	K3
C301.3	<b>Associate</b> the applications of Graph theory models and data structures.	K2
C301.4	<b>Describe</b> the concepts and properties of algebraic structures such as groups, rings and fields.	K1
C301.5	<b>Extend</b> the concepts of Boolean algebra in the area of lattices.	K2

Course Code and Name : C302 & CS6501 - Internet Programming		
	CO Statements	Knowledge Level
The students should be able to		
C302.1	<b>Implement</b> the concepts of Control Statements, I/O Applet and Threading	K5
C302.2	<b>Create</b> a basic website using HTML and Cascading Style Sheets.	K6
C302.3	<b>Design</b> and implement client side programs using JavaScript and server side programs using Servlets and JSP.	K4
C302.4	<b>Design</b> and implement simple web page in PHP, and to present data in XML format.	K4
C302.5	<b>Design</b> rich client presentation using AJAX and implement web services.	K4

Course Code and Name : C303 & CS6502 - Object Oriented Analysis and Design		
	CO Statements	Knowledge Level
The students should be able to		
C303.1	<b>Use</b> the OOAD concepts and various UML diagrams	K3
C303.2	<b>Interpret</b> and use the GRASP design patterns and GoF Design patterns.	K2
C303.3	<b>Analyze</b> and design use case modeling and domain modeling.	K4
C303.4	<b>Apply</b> appropriate design patterns.	K3
C303.5	<b>Design</b> and implement projects using Object Oriented concepts and compare various testing techniques	K4





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## Course Code and Name : C304 & CS6503 - Theory of Computation

	CO Statements	Knowledge Level
The students should be able to		
C304.1	<b>Construct</b> a minimized finite automaton to recognize a given regular language.	K6
C304.2	<b>Describe</b> formal relationships among machines, languages and grammars.	K1
C304.3	<b>Construct</b> the pushdown automata for all the context free language.	K6
C304.4	<b>Discuss</b> the basic properties of Turing Machines and Techniques for Turing machine construction.	K2
C304.5	<b>Create</b> the decidability or Un-decidability of various problems.	K6

## Course Code and Name : C305 & CS6504 - Computer Graphics

	CO Statements	Knowledge Level
The students should be able to		
C305.1	<b>Describe</b> the graphics hardware devices, software used and different drawing algorithms.	K1
C305.2	<b>Apply</b> two dimensional transformations and clipping techniques to graphical objects.	K3
C305.3	<b>Design</b> three-dimensional graphical objects and apply three-dimensional transformations into graphical objects.	K4
C305.4	<b>Create</b> the illumination and color models.	K6
C305.5	<b>Design</b> an animation sequences.	K4

## Course Code and Name : C306 & CS6511 - Case Tools Laboratory

	CO Statements	Knowledge Level
The students should be able to		
C306.1	<b>Design</b> and implement projects using Object Oriented concepts.	K5
C306.2	<b>Use</b> the UML analysis and design diagrams.	K3
C306.3	<b>Apply</b> appropriate design patterns	K3
C306.4	<b>Create</b> code from design	K6
C306.5	<b>Compare and contrast</b> various testing techniques.	K5







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Course Code and Name : C307 & CS6512 Internet Programming Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C307.1	<b>Illustrate</b> web pages using HTML/XML and style sheets	K4
C307.2	<b>Analyze</b> user interfaces using Java frames and applets	K4
C307.3	<b>Compare</b> and contrast dynamic web pages using server side scripting	K4
C307.4	<b>Develop</b> a Client Server application and use the frameworks JSP Strut, Spring	K3
C307.5	<b>Create</b> applications with AJAX and web services.	K6

Course Code and Name : C308 & CS6513 - Computer Graphics Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C308.1	<b>Make</b> use of algorithms to draw 2D and 3D objects	K2
C308.2	<b>Show</b> transformations and projections for 2D and 3D objects	K6
C308.3	<b>Manipulate</b> a graphical object using clipping algorithms and viewing technique	K5
C308.4	<b>Use</b> an image editing tool for image manipulation and enhancement	K6
C308.5	<b>Utilize</b> the authoring tool to develop a 3D scene and to perform 2D animation	K6



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## SEMESTER 6

### Course Code and Name : C309 & CS6601 - Distributed Systems

CO Statements		Knowledge Level
The students should be able to		
C309.1	<b>Describe</b> the trends and challenges in distributed system	K1
C309.2	<b>Apply</b> network virtualization, remote method invocation and objects.	K3
C309.3	<b>Demonstrate</b> peer-to-peer services and distributed file system	K3
C309.4	<b>Analyze</b> the issues related to scalability, synchronization, transaction processing, concurrency and reliability in distributed system.	K4
C309.5	<b>Design</b> process and resource management systems.	K4

### Course Code and Name : C310 & IT6601 - Mobile Computing

CO Statements		Knowledge Level
The students should be able to		
C310.1	<b>Describe</b> the basic concepts of mobile computing and MAC protocol.	K1
C310.2	<b>Choose</b> the required functionality at each layer for given application.	K4
C310.3	<b>Classify</b> different types of mobile telecommunication systems	K2
C310.4	<b>Design</b> the Adhoc networks concepts and its routing protocols	K4
C310.5	<b>Make</b> use of mobile operating systems in developing mobile applications	K4

### Course Code and Name : C311 & CS6660 - Compiler Design

CO Statements		Knowledge Level
The students should be able to		
C311.1	<b>Summarize</b> the basic concepts of compiler and its phases.	K6
C311.2	<b>Implement</b> the functionalities of lexical analysis phase like conversion of regular expression to DFA and minimization of DFA.	K5
C311.3	<b>Design</b> the parsing table using different parsing techniques and different compiler construction tools.	K4
C311.4	<b>Use</b> the translation process and run time environment issues.	K6
C311.5	<b>Apply</b> the various optimization techniques for effectively generating machine code.	K3





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Course Code and Name : C312 & IT6502 - Digital Signal Processing		
	CO Statements	Knowledge Level
The students should be able to		
C312.1	<b>Understand</b> the basics of signals and systems	K1
C312.2	<b>Perform</b> frequency transforms for the signals.	K2
C312.3	<b>Design</b> IIR filters.	K5
C312.4	<b>Design</b> FIR filters.	K5
C312.5	<b>Analyze</b> the finite word length effects in digital filters	K4

Course Code and Name : C313 & CS6659 - Artificial Intelligence		
	CO Statements	Knowledge Level
The students should be able to		
C313.1	<b>Identify</b> appropriate AI methods to solve a problem using search technique.	K1
C313.2	<b>Demonstrate</b> the knowledge in predicate and propositional logic and their roles in logic programming.	K3
C313.3	<b>Formalize</b> a given problem in the language / framework of different AI methods.	K3
C313.4	<b>Apply</b> the machine learning techniques in solving the real- world problems.	K3
C313.5	<b>Elucidate</b> the idea of Knowledge Acquisition and Expert Systems	K5

Course Code and Name : C314 & GE6757 - Total Quality Management		
	CO Statements	Knowledge Level
The students should be able to		
C314.1	<b>Outline</b> the dimensions and barrier regarding quality.	K1
C314.2	<b>Illustrate</b> the TQM Principles	K4
C314.3	<b>Demonstrate</b> the tools utilization for quality improvement.	K3
C314.4	<b>Build</b> the various types of techniques that are used to measure quality	K2
C314.5	<b>Apply</b> various quality systems and implementation of TQM	K3



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Course Code and Name : C315 & CS6611 - Mobile Application Development Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C315.1	<b>Build</b> a native application using GUI components and Mobile application development framework	K2
C315.2	<b>Choose</b> the required architecture based upon the mobile application to be developed.	K4
C315.3	<b>Design</b> mobile applications using various layout and widgets.	K4
C315.4	<b>Implement</b> various mobile applications using emulators.	K5
C315.5	<b>Deploy</b> applications to hand-held devices	K3

Course Code and Name : C316 & CS6612 - Compiler Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C316.1	<b>Apply</b> different compiler writing tools to implement the different Phases	K3
C316.2	<b>Implement</b> the different Phases of compiler using tools.	K5
C316.3	<b>Analyze</b> the control flow and data flow of a typical program.	K4
C316.4	<b>Design</b> the back end of a compiler for 8086 assembler	K4
C316.5	<b>Generate</b> an assembly language program equivalent to a source language program.	K6

Course Code and Name : C317 & GE6674 - Communication and Soft Skills Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C317.1	<b>Apply</b> appropriate communications skills across setting purposes and audiences	K2
C317.2	<b>Demonstrate</b> Knowledge of communication theory and applications.	K6
C317.3	<b>Organize</b> different genres of texts adopting various reading strategies.	K6
C317.4	<b>Distinguish</b> and comprehend different spoken discourses/excerpts in different accents.	K2
C317.5	<b>Listen</b> to different accents, speeches and presentations.	K2



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## SEMESTER 7

Course Code and Name : C401 & CS6701 - Cryptography and Network Security		
	CO Statements	Knowledge Level
The students should be able to		
C401.1	<b>Interpret</b> the basic concepts, OSI security architecture, finite fields and number theory.	K5
C401.2	<b>Compare</b> the various Cryptographic techniques.	K5
C401.3	<b>Determine</b> the usage of hash functions and digital signature	K5
C401.4	<b>Demonstrate</b> different types of security systems and applications.	K4
C401.5	<b>Discuss</b> different levels of security and services.	K6

Course Code and Name : C402 & CS6702 - Graph Theory and Applications		
	CO Statements	Knowledge Level
The students should be able to		
C402.1	<b>Define</b> basic concepts & terminologies of Graph, Isomorphism, Trees and its properties	K1
C402.2	<b>Analyze</b> solution for Konigsberg bridge problem using Euler's graph.	K4
C402.3	<b>Analyze</b> a solution for a maximum flow in network using Network Flow Graph theory.	K4
C402.4	<b>Understand</b> the principles of Inclusion and Exclusion, Binomial theorem and traffic problem.	K2
C402.5	<b>Apply</b> permutation and Combination and solve seating arrangement problem.	K3

3.Course Code and Name : C403 & CS6703 - Grid and Cloud Computing		
	CO Statements	Knowledge Level
The students should be able to		
C403.1	<b>Describe</b> the architecture of Grid and Cloud Computing.	K1
C403.2	<b>Apply</b> the knowledge to solve the large-scale problem in grid computing.	K3
C403.3	<b>Explore</b> the concepts of Virtualization.	K6
C403.4	<b>Develop</b> the web services using the grid and cloud technologies.	K4
C403.5	<b>Apply</b> security mechanism in grid and cloud computing.	K3





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## Course Code and Name : C404 & CS6704 - Resource Management Techniques

CO Statements		Knowledge Level
The students should be able to		
C404.1	<b>Solve</b> the linear programming problems using Graphical method and Simplex method.	K3
C404.2	<b>Solve</b> specialized Linear programming problems like transportation and assignment problems.	K3
C404.3	<b>Using</b> Branch & Bound technique solve real world problems.	K3
C404.4	<b>Compute</b> critical path analysis to solve real life project schedule time & timely delivery.	K3
C404.5	<b>Understand</b> the role & applications of PERT/COST/CPM for project scheduling.	K6

## Course Code and Name : C405 & IT6801 - Service Oriented Architecture

CO Statements		Knowledge Level
The students should be able to		
C405.1	<b>Develop</b> a simple XML document coding and XML Schema.	K4
C405.2	<b>Create</b> an application based on XML and database.	K6
C405.3	<b>Compare</b> the characteristics and principles of Service oriented architecture with client server and distributed architecture.	K5
C405.4	<b>Describe</b> the web services using WSDL, SOAP and UDDI.	K1
C405.5	<b>Build</b> a Service oriented architecture based applications for intra-enterprise and inter- enterprise applications using J2EE.	K6

## Course Code and Name : C406 & CS6007 - Information Retrieval

CO Statements		Knowledge Level
The students should be able to		
C406.1	<b>Apply</b> information retrieval models	K3
C406.2	<b>Design</b> Web Search Engine.	K4
C406.3	<b>Use</b> Link Analysis	K3
C406.4	<b>Use</b> Hadoop and Map Reduce	K3
C406.5	<b>Apply</b> document text mining techniques.	K3



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Course Code and Name : C407 & CS6711 - Security Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C407.1	<b>Apply</b> the cryptographic algorithms for data communication	K5
C407.2	<b>Compare</b> the performance of various security algorithms	K4
C407.3	<b>Apply</b> the Digital signature for secure data transmission	K3
C407.4	<b>Utilize</b> the different open source tools for network security and analysis	K4
C407.5	<b>Demonstrate</b> intrusion detection system using network security tool.	K4

Course Code and Name : C408 & CS6712 - Grid and Cloud Computing Laboratory		
	CO Statements	Knowledge Level
The students should be able to		
C408.1	<b>Develop</b> application using Globus toolkit.	K4
C408.2	<b>Develop</b> web services/application using Grid framework	K4
C408.3	<b>Run</b> Virtual machine and install software on it.	K5
C408.4	<b>Setup</b> a private cloud using OpenStack / Open Nebula / Eucalyptus	K5
C408.5	<b>Implement</b> applications using MapReduce approach in Hadoop environment.	K5



  
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## SEMESTER 8

### Course Code and Name : C409 & CS6801 - Multicore Architecture & Programming

CO Statements		Knowledge Level
The students should be able to		
C409.1	<b>Describe</b> the parallel architecture and parallel programming model	K1
C409.2	<b>Analyze</b> the issues related to various challenges in parallel programming	K4
C409.3	<b>Develop</b> parallel programming applications using openMP	K4
C409.4	<b>Design and develop</b> distributed programming application using openMPI	K3
C409.5	<b>Compare and analyze</b> the programming model for serial processor and parallel processor implementation.	K5

### Course Code and Name : C410 & CS6008 - Human Computer Interaction

CO Statements		Knowledge Level
The students should be able to		
C410.1	<b>Understand</b> the basic foundations of Human Computer Interaction.	K2
C410.2	<b>Design</b> effective HCI for individuals and persons with disabilities.	K3
C410.3	<b>Simplify</b> the issues in the HCI Models and assess the importance of user feedback	K2
C410.4	<b>State</b> the Mobile HCI implications for designing multimedia/ e-commerce/ e-learning Web sites.	K4
C410.5	<b>Develop</b> the meaningful user interface.	K4

### Course Code and Name : C411 & GE6075 - Professional Ethics in Engineering

CO Statements		Knowledge Level
The students should be able to		
C411.1	<b>Apply</b> ethics, morals and human values in society.	K3
C411.2	<b>Understand</b> about engineering ethics.	K2
C411.3	<b>Describe</b> the responsibilities of engineers as experimenters.	K1
C411.4	<b>Recognize</b> the safety, risks, risk benefit analysis and rights of an engineer.	K1
C411.5	<b>Discuss</b> the importance of the global issues, moral leadership and code of conduct.	K2







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Course Code and Name : C412 & CS6811 - Project Work		
	CO Statements	Knowledge Level
The students should be able to		
C412.1	<b>Apply</b> the fundamental knowledge and skills, Which are acquired within the technical area, to a given problem	K3
C412.2	<b>Identify and summarize</b> an appropriate list of literature review, analyze previous researchers' Work and relate them to the project.	K1
C412.3	<b>Design</b> engineering solutions to complex problems in a systematic approach.	K4
C412.4	<b>Document</b> and present one's own work, for a given target group, with strict requirements on structure, format, and language usage.	K6
C412.5	<b>Present</b> the project outlining the approach and expected results using good oral and written presentation skills.	K6

  
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### 5.i) Sample CSE Attainment of Course Outcomes (Internal & Model Examination)

Course Code: C405

Subject Code & Name: IT6801 & Service Oriented Architecture

S.No.	Register Number	Name	Internal Test -I			Internal Test -II			Model Examination					
			CO1	CO2	Total	CO3	CO4	Total	CO1	CO2	CO3	CO4	CO5	Total
1.	920816104001	ABIRAMI M	43	28	71	36	55	91	27	14	15	14	15	85
2.	920816104002	ARUNA DEVI P	40	27	67	32	48	80	27	15	14	14	14	84
3.	920816104003	ASHWIN SARAVANAN R C	17	11	28	11	17	28	18	9	10	9	9	55
4.	920816104004	BALAJI J	27	18	45	21	31	52	15	8	9	8	8	48
5.	920816104005	BALAJI R M	15	10	25	24	36	60	15	8	8	8	7	46
6.	920816104006	CHARUMATHY B	29	19	48	20	29	49	0	0	0	0	0	0
7.	920816104008	DIVYA A	47	32	79	27	41	68	26	14	14	14	13	81
8.	920816104009	DURGADEVI P	46	30	76	24	36	60	22	12	12	12	12	70
9.	920816104010	GOMATHI AKILA D	43	28	71	30	45	75	26	14	14	14	14	82
10.	920816104011	GURU PRASATH S	31	20	51	29	44	73	21	11	11	11	11	65
11.	920816104012	HARI VIGNESH S	41	27	68	28	43	71	23	13	12	12	12	72
12.	920816104013	ILAMATHI G	36	24	60	36	54	90	25	13	13	14	13	78
13.	920816104014	KANNAN B	25	17	42	10	15	25	16	9	7	9	9	50
14.	920816104015	KARTHICK RAJA T	17	12	29	12	19	31	14	7	7	7	8	43
15.	920816104016	KARTHIGA S	19	12	31	30	44	74	26	14	12	14	14	80
16.	920816104017	KEERTHANA M	40	27	67	35	53	88	26	14	14	14	14	82
17.	920816104018	MADHAN N	28	18	46	16	23	39	8	4	4	5	4	25
18.	920816104019	MADHUMITHA A	47	32	79	34	50	84	21	11	11	11	11	65
19.	920816104020	MAHALAKSHMI M	43	29	72	33	49	82	27	14	14	16	14	85
20.	920816104021	MOINUDEEN S	20	13	33	31	47	78	22	12	12	10	12	68
21.	920816104022	MUTHU T	25	16	41	30	45	75	24	13	13	13	11	74
22.	920816104023	NANDHINI S	39	26	65	27	41	68	22	12	12	12	11	69
23.	920816104024	PAVITHRAN M	22	14	36	22	32	54	21	11	11	11	11	65
24.	920816104025	PRASATH T	27	18	45	23	34	57	21	11	11	11	11	65
25.	920816104026	PRAVIN VINO M	17	11	28	14	22	36	20	10	10	10	11	61
26.	920816104027	PREETHA B	47	32	79	28	43	71	29	15	16	15	16	91
27.	920816104028	PREETHA T	37	24	61	24	36	60	25	13	13	13	14	78
28.	920816104029	SABARI KRISHNAN S K	37	24	61	34	50	84	26	14	13	13	14	80
29.	920816104030	SANTHOSH KUMAR A	20	13	33	21	31	52	20	11	11	9	11	62
30.	920816104031	SELVANAYAKI C	48	32	80	35	52	87	32	17	17	16	17	99
31.	920816104032	SENTHIL N P	36	24	60	23	34	57	27	16	14	14	14	85
32.	920816104033	SHREEDHAR V	40	26	66	27	41	68	26	14	14	14	14	82
33.	920816104034	SHRI JANANI S	40	27	67	33	50	83	29	15	16	15	15	90





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34.	920816104035	SHRUTHI M	38	26	64	35	52	87	20	11	10	11	11	63
35.	920816104036	SIVASUBRAMANIAN C	37	25	62	26	38	64	22	12	12	12	11	69
36.	920816104038	SRINITHI P	15	10	25	32	49	81	22	11	12	12	12	69
37.	920816104039	SRIPRIYA P	47	32	79	37	56	93	32	17	17	17	16	99
38.	920816104040	SUNDARAM S K K	31	21	52	22	34	56	17	9	9	9	8	52
39.	920816104041	SURYA S	25	16	41	26	39	65	17	10	9	9	9	54
40.	920816104042	SWETHA A	28	19	47	23	35	58	8	4	4	4	4	24
41.	920816104043	TAMILSELVAN M	33	22	55	33	50	83	29	15	15	16	15	90
42.	920816104044	YOGESH JOHN	22	15	37	20	29	49	23	12	12	12	12	71
43.	920816104301	SHARUKKHAN S	34	23	57	28	42	70	19	10	10	11	10	60
44.	920816104701	KISHORE KUMAR D	16	10	26	18	26	44	3	1	2	1	2	9
45.	920816104901	NAVIRIN BHAJILA A	42	28	70	38	56	94	32	16	16	17	16	97
Maximum Mark Co-Wise			60	40	100	40	60	100	32	17	17	17	17	100
50% of Maximum Marks			30	20	50	20	30	50	16	8.5	8.5	8.5	8.5	50
Number of Threshold above 50%			26	26	26	39	37	37	38	38	38	38	37	38
Level			1	1	1	3	3	3	3	3	3	3	3	3

## CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C405.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C405.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C405.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C405.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C405.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C405	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	1.95	1.95	1.95	2.92	-	1.75	1.75	1.75	2.92	2.92	-	1.95	0.97	-	-

## RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

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**ii) Sample CSE Attainment of Course Outcomes ( University Examination)**

**Course Code: C405      Subject Code & Name: IT6801 & Service Oriented Architecture**

S.No.	Register Number	Name	Grade	Grade Points
1.	920816104001	ABIRAMI M	B	8
2.	920816104002	ARUNA DEVI P	B	8
3.	920816104003	ASHWIN SARAVANAN RC	U	0
4.	920816104004	BALAJI J	C	7
5.	920816104005	BALAJI R M	E	5
6.	920816104006	CHARUMATHY B	U	0
7.	920816104008	DIVYA A	C	7
8.	920816104009	DURGADEVI P	E	5
9.	920816104010	GOMATHI AKILA D	E	5
10.	920816104011	GURU PRASATH S	E	5
11.	920816104012	HARI VIGNESH S	C	7
12.	920816104013	ILAMATHI G	B	8
13.	920816104014	KANNAN B	E	5
14.	920816104015	KARTHICK RAJA T	U	0
15.	920816104016	KARTHIGA S	C	7
16.	920816104017	KEERTHANA M	B	8
17.	920816104018	MADHAN N	U	0
18.	920816104019	MADHUMITHA A	C	7
19.	920816104020	MAHALAKSHMI M	C	7
20.	920816104021	MOINUDEEN S	B	8
21.	920816104022	MUTHU T	E	5
22.	920816104023	NANDHINI S	C	7
23.	920816104024	PAVITHRAN M	E	5
24.	920816104025	PRASATH T	D	6
25.	920816104026	PRAVIN VINO M	D	6





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26.	920816104027	PREETHA B	E	5
27.	920816104028	PREETHA T	E	5
28.	920816104029	SABARI KRISHNAN S K	C	7
29.	920816104030	SANTHOSH KUMAR A	E	5
30.	920816104031	SELVANAYAKI C	B	8
31.	920816104032	SENTHIL N P	B	8
32.	920816104033	SHREEDHAR V	B	8
33.	920816104034	SHRI JANANI S	C	7
34.	920816104035	SHRUTHI M	B	8
35.	920816104036	SIVASUBRAMANIAN C	D	6
36.	920816104038	SRINITHI P	B	8
37.	920816104039	SRIPRIYA P	B	8
38.	920816104040	SUNDARAM S K K	C	7
39.	920816104041	SURYA S	E	5
40.	920816104042	SWETHA A	U	0
41.	920816104043	TAMILSELVAN M	B	8
42.	920816104044	YOGESH JOHN	D	6
43.	920816104301	SHARUKKHAN S	D	6
44.	920816104701	KISHORE KUMAR D	U	0
45.	920816104901	NAVRIN BHAJILA A	A	9
<b>Maximum Mark Co-Wise</b>				<b>10</b>
<b>50% of Maximum Marks</b>				<b>5</b>
<b>Number of Threshold above 50%</b>				<b>39</b>
<b>Level</b>				<b>3</b>





# NPR College of Engineering & Technology

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C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	1	0	3	2.00	3
CO2	1	0	3	2.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				2.60	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.52	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				2.92	

### Internal Examination and University examination:

The 80% of students had scored equal to or more than the 50 marks in Internal Examination, making the attainment level as 3.

The 80% of students had scored E grade and above in university examination, making the attainment level as 3.

### CO Attainment Calculations:

CO Attainment is calculated from the 80% of marks in university examination and 20% of marks in internal examination.

The Internal Examination attainment level for the course Service Oriented Architecture is 2.60 and it is converted into 20% i.e., 0.52.

In the university examination 86.66% of the students scored more than the set attainment level of E grade in the corresponding course so the University Examination attainment level is 3.00 and it is converted into 80% i.e., 2.40.

Internal Examination (20%)	0.52
University Examination (80%)	2.40
<b>Final CO Attainment</b>	<b>2.92</b>

Therefore the CO attainment for the course Service Oriented Architecture is 2.92



**Dr. J.SUNDARARAJAN,**

B.E., M.Tech., Ph.D.,

Principal

N.P.R. College of Engineering & Technology  
Natham, Dindigul (Dt) - 624 401.



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## 6. CO – PO Mapping for CSE (Regulation 2013)

The mapping level contribution between CO-PO/PSOs is categorized as follows:

3: High

2: Medium

1: Low

- : No correlation

### SEMESTER 1

Programme: B.E. Computer Science and Engineering

Year & Sem: I & I

Course Code & Name: C101 & HS6151 - Technical English - I

Year of Study : 2016-2017

#### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C101.1	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.2	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.3	-	-	-	-	-	-	-	-	2	3	-	2	-	-	-
C101.4	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101.5	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C101	-	-	-	-	-	-	-	-	2.80	3.00	-	2.00	-	-	-
PO ATTAINMENT	-	-	-	-	-	-	-	-	2.80	3.00	-	2.00	-	-	-

#### RUBRICS

26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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**Programme: B.E. Computer Science and Engineering**

**Year & Sem: I & I**

**Course Code & Name: C102 & MA6151 - Mathematics - I**

**Year of Study : 2016-2017**

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C102.1	3	3	2	1	2	3	-	-	3	2	3	3	1	2	1
C102.2	3	3	2	1	2	3	-	-	3	2	3	3	1	-	1
C102.3	3	3	2	1	2	3	-	-	3	2	3	3	2	1	1
C102.4	3	3	2	1	2	3	-	-	3	2	3	3	1	1	1
C102.5	3	3	2	1	2	3	-	-	3	2	3	3	2	2	1
C102	3.00	3.00	2.00	1.00	2.00	3.00	0.00	0.00	3.00	2.00	3.00	3.00	1.40	1.50	1.00
PO ATTAINMENT	3.00	3.00	2.00	1.00	2.00	3.00	-	-	3.00	2.00	3.00	3.00	1.40	1.50	1.00

### RUBRICS

26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

CI01	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	







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**Programme: B.E. Computer Science and Engineering**

**Year & Sem: I & I**

**Course Code & Name: C103 & PH6151 - Engineering Physics - I**

**Year of Study: 2016-2017**

COURSE OUTCOME	CO Vs PO														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C103.1	2	1	2	3	3	1	-	-	-	-	-	1	1	2	1
C103.2	1	2	3	3	3	2	2	-	-	-	-	1	2	3	3
C103.3	2	2	3	3	2	2	3	-	-	-	-	2	1	3	2
C103.4	2	3	2	2	2	1	1	-	-	-	-	1	3	2	1
C103.5	3	1	-	1	-	-	-	-	-	-	-	1	3	2	1
C103	2.00	1.80	2.50	2.40	2.50	1.50	2.00	-	-	-	-	-	1	1	1
PO ATTAINMENT	2.00	1.80	2.50	2.40	2.50	1.50	2.00	-	-	-	-	1.25	1.60	2.20	1.60

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; I</b>
<b>Course Code &amp; Name:</b>	<b>C104 &amp; CY6151 - Engineering Chemistry - I</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C104.1	3	2	1	1	2	2	3	-	1	2	3	2	1	2	1
C104.2	3	1	2	2	1	1	1	-	-	2	2	2	2	2	3
C104.3	3	1	3	3	3	1	2	1	2	2	2	3	3	1	2
C104.4	3	2	2	3	2	1	1	-	2	2	1	1	3	2	2
C104.5	3	1	2	3	3	2	2	1	2	2	2	3	1	-	1
C104	3.00	1.40	2.00	2.40	2.20	1.40	1.80	1.00	1.75	2.00	2.00	2.20	2.00	1.75	1.80
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>1.40</b>	<b>2.00</b>	<b>2.40</b>	<b>2.20</b>	<b>1.40</b>	<b>1.80</b>	<b>1.00</b>	<b>1.75</b>	<b>2.00</b>	<b>2.00</b>	<b>2.20</b>	<b>2.00</b>	<b>1.75</b>	<b>1.80</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



 <p><b>NPR</b> Reach the Star</p>	<h1>NPR College of Engineering &amp; Technology</h1> <p>NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.          Approved by AICTE, New Delhi &amp; Affiliated to Anna University, Chennai.          An ISO 9001:2015 Certified Institution.          Phone No: 04544- 246 500, 246501, 246502.          Website : <a href="http://www.nprcolleges.org">www.nprcolleges.org</a>, <a href="http://www.nprcet.org">www.nprcet.org</a>, Email <a href="mailto:nprcetprincipal@nprcolleges.org">nprcetprincipal@nprcolleges.org</a></p>	
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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; I</b>
<b>Course Code &amp; Name:</b>	<b>C105 &amp; GE6151 - Computer Programming</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C105.1	3	3	3	3	-	-	-	-	2	3	2	3	3	3	2
C105.2	3	3	3	2	-	-	-	-	2	-	2	3	3	3	2
C105.3	3	3	3	2	-	-	-	-	2	-	2	3	3	3	2
C105.4	3	3	3	2	-	-	-	-	3	-	2	3	3	3	2
C105.5	3	3	3	2	-	-	-	-	2	-	2	3	3	3	2
C105	3.00	3.00	3.00	2.20	-	-	-	-	2.20	3.00	2.00	3.00	3.00	3.00	2.00
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>2.20</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.20</b>	<b>3.00</b>	<b>2.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>2.00</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>1 &amp; 1</b>
<b>Course Code &amp; Name:</b>	<b>C106 &amp; GE6152 - Engineering Graphics</b>
<b>Year of Study :</b>	<b>2016-2017</b>

COURSE OUTCOME	CO Vs PO														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C106.1	1	1	2	1	-	-	-	-	-	2	-	2	2	1	-
C106.2	1	1	2	1	-	-	-	-	-	2	-	2	2	3	-
C106.3	1	1	2	1	-	-	-	-	-	2	-	2	2	2	-
C106.4	1	1	2	1	-	-	-	-	-	2	-	2	2	1	-
C106.5	1	1	2	1	-	-	-	-	-	2	-	2	2	2	-
C106	1.00	1.00	2.00	1.00	-	-	-	-	-	2.00	-	2.00	2.00	1.80	-
<b>PO ATTAINMENT</b>	<b>1.00</b>	<b>1.00</b>	<b>2.00</b>	<b>1.00</b>	-	-	-	-	-	<b>2.00</b>	-	<b>2.00</b>	<b>2.00</b>	<b>1.80</b>	-

RUBRICS	
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35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; I</b>
<b>Course Code &amp; Name:</b>	<b>C107 &amp; GE6161 - Computer Practices Laboratory</b>
<b>Year of Study :</b>	<b>2016-2017</b>

COURSE OUTCOME	CO Vs PO														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C107.1	1	1	3	-	-	-	-	-	3	-	3	3	2	2	2
C107.2	3	3	3	3	-	-	-	-	3	-	3	3	3	3	2
C107.3	3	3	3	3	-	-	-	-	3	-	3	3	3	3	2
C107.4	1	1	2	1	-	-	-	-	3	-	3	3	3	3	2
C107.5	1	1	2	1	-	-	-	-	2	-	2	2	2	1	-
C107	1.80	1.80	2.60	2.00	-	-	-	-	3.00	2.00	3.00	2.60	2.40	2.20	2.00
PO ATTAINMENT	1.80	1.80	2.60	2.00	-	-	-	-	3.00	2.00	3.00	2.60	2.40	2.20	2.00

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; I</b>
<b>Course Code &amp; Name:</b>	<b>C108 &amp; GE6162 - Engineering Practices Laboratory</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C108.1	1	1	2	1	-	-	-	-	-	2	-	2	1	-	-
C108.2	1	1	2	1	-	-	-	-	-	2	-	2	1	-	-
C108.3	1	1	2	1	-	-	-	-	-	2	-	2	1	-	-
C108.4	1	1	2	1	-	-	-	-	-	2	-	2	1	-	-
C108	1.00	1.00	2.00	1.00	-	-	-	-	-	2.00	-	2.00	1.00	-	-
PO ATTAINMENT	1.00	1.00	2.00	1.00	-	-	-	-	-	2.00	-	2.00	1.00	-	-

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; I</b>
<b>Course Code &amp; Name:</b>	<b>C109 &amp; GE6163 - Physics and Chemistry Laboratory</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C109.1	2	1	2	2	2	1	1	-	2	2	2	2	2	1	2
C109.2	2	1	2	2	2	1	1	-	2	2	2	2	2	1	2
C109.3	2	1	2	2	2	1	1	-	2	2	2	2	2	1	2
C109	2.00	1.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	1.00	2.00
PO ATTAINMENT	2.00	1.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	1.00	2.00

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



**Dr. J.SUNDARARAJAN,**  
 B.E., M.Tech., Ph.D.,  
 Principal  
 N.P.R. College of Engineering & Technology  
 Natham, Dindigul (Dt) - 624 401.



# NPR College of Engineering & Technology

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## SEMESTER 2

Programme: B.E. Computer Science and Engineering

Year & Sem: I & II

Course Code & Name: C110 & HS6251 - Technical English - II

Year of Study : 2016-2017

COURSE OUTCOME	CO Vs PO														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C110.1	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C110.2	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C110.3	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C110.4	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C110.5	-	-	-	-	-	-	-	-	3	3	-	2	-	-	-
C110	-	-	-	-	-	-	-	-	3.00	3.00	-	2.00	-	-	-
PO ATTAINMENT	-	-	-	-	-	-	-	-	3.00	3.00	-	2.00	-	-	-

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	







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Programme: B.E. Computer Science and Engineering	
Year & Sem:	I & II
Course Code & Name:	C111 & MA6251 - Mathematics - II
Year of Study :	2016-2017

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C111.1	3	3	2	2	2	1	-	-	-	-	2	1	2	2	2
C111.2	3	3	1	1	1	1	-	-	-	-	2	1	2	1	1
C111.3	3	3	-	1	-	-	-	-	-	-	1	-	2	1	1
C111.4	3	3	2	2	1	1	-	1	-	-	1	1	2	1	2
C111.5	3	3	2	1	-	-	-	-	-	-	1	-	1	1	1
C111	3.00	3.00	1.75	1.40	1.33	1.00	-	1.00	-	-	1.40	1.00	1.80	1.20	1.40
PO ATTAINMENT	1.40	1.40	0.82	0.65	0.62	0.47	-	0.47	-	-	0.65	0.47	0.84	0.56	0.65

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				1.40	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; II</b>
<b>Course Code &amp; Name:</b>	<b>C112 &amp; PH6251 - Engineering Physics - II</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C112.1	2	1	2	3	3	1	-	-	-	-	-	1	3	1	1
C112.2	3	2	3	3	3	2	2	-	-	-	-	1	3	3	3
C112.3	3	2	3	3	2	2	3	-	-	-	-	2	3	1	2
C112.4	2	3	2	2	2	1	1	-	-	-	-	1	3	2	2
C112.5	2	1	-	1	-	-	-	-	-	-	-	-	1	-	1
<b>C112</b>	<b>2.40</b>	<b>1.80</b>	<b>2.50</b>	<b>2.40</b>	<b>2.50</b>	<b>1.50</b>	<b>2.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.25</b>	<b>2.60</b>	<b>1.75</b>	<b>1.80</b>
<b>PO ATTAINMENT</b>	<b>1.12</b>	<b>0.84</b>	<b>1.17</b>	<b>1.12</b>	<b>1.17</b>	<b>0.70</b>	<b>0.93</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.58</b>	<b>1.21</b>	<b>0.82</b>	<b>0.84</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; II</b>
<b>Course Code &amp; Name:</b>	<b>C113 &amp; CY6251 - Engineering Chemistry - II</b>
<b>Year of Study :</b>	<b>2016-2017</b>

COURSE OUTCOME	CO Vs PO														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C113.1	3	2	1	1	2	2	3	-	1	2	2	2	3	1	1
C113.2	3	1	2	2	1	1	1	-	-	2	1	2	2	1	3
C113.3	3	1	2	1	2	1	1	-	2	2	2	3	1	2	1
C113.4	3	2	2	2	2	1	2	-	1	2	1	1	2	3	3
C113.5	3	1	1	3	2	2	2	-	2	2	1	2	1	2	1
C113	3.00	1.40	1.60	1.80	1.80	1.40	1.80	-	1.50	2.00	1.40	2.00	1.80	1.80	1.80
PO ATTAINMENT	1.40	0.65	0.75	0.84	0.84	0.65	0.84	-	0.70	0.93	0.65	0.93	0.84	0.84	0.84

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26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; II</b>
<b>Course Code &amp; Name:</b>	<b>C114 &amp; CS6201 - Digital Principles and System Design</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C114.1	3	2	1	1	-	1	1	-	-	-	-	-	3	1	1
C114.2	3	2	2	2	-	1	1	-	-	-	-	-	2	2	1
C114.3	3	2	2	2	-	1	1	-	-	-	-	-	3	2	1
C114.4	3	2	2	2	-	1	1	-	-	-	-	1	2	2	1
C114.5	3	2	2	2	1	1	1	1	-	-	-	1	2	2	1
C114	3.00	2.00	1.80	1.80	1.00	1.00	1.00	1.00	-	-	-	1.00	2.40	1.80	1.00
PO ATTAINMENT	1.40	0.93	0.84	0.84	0.47	0.47	0.47	0.47	-	-	-	0.47	1.12	0.84	0.47

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; II</b>
<b>Course Code &amp; Name:</b>	<b>C115 &amp; CS6202 - Programming and Data Structures I</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C115.1	3	2	3	3	1	-	-	-	-	-	-	-	3	3	1
C115.2	3	2	2	1	-	-	-	-	-	-	-	-	3	2	-
C115.3	3	3	3	2	-	-	-	-	-	-	-	-	3	2	-
C115.4	3	2	1	-	-	-	-	-	-	-	-	-	3	1	1
C115.5	3	3	-	-	-	-	-	-	-	-	-	-	3	1	1
<b>C115</b>	<b>3.00</b>	<b>2.40</b>	<b>2.25</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3.00</b>	<b>1.80</b>	<b>1.00</b>
<b>PO ATTAINMENT</b>	<b>1.40</b>	<b>1.12</b>	<b>1.05</b>	<b>0.93</b>	<b>0.47</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.40</b>	<b>0.84</b>	<b>0.47</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	I & II
<b>Course Code &amp; Name:</b>	C116 & GE6262 - Physics and Chemistry Laboratory - II
<b>Year of Study :</b>	2016-2017

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C116.1	2	2	1	1	2	1	1	1	2	1	1	2	2	2	1
C116.2	2	2	1	1	1	2	2	-	1	1	2	1	2	2	1
C116.3	1	2	2	1	1	2	1	-	2	1	1	2	1	2	2
C116	1.67	2.00	1.33	1.00	1.33	1.67	1.33	1.00	1.67	1.00	1.33	1.67	1.67	2.00	1.33
PO ATTAINMENT	1.67	2.00	1.33	1.00	1.33	1.67	1.33	1.00	1.67	1.00	1.33	1.67	1.67	2.00	1.33

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; II</b>
<b>Course Code &amp; Name:</b>	<b>C117 &amp; CS6211 - Digital Laboratory</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C117.1	3	1	1	1	-	1	1	-	-	-	-	-	3	1	1
C117.2	3	2	2	2	-	1	1	-	-	-	-	-	2	2	1
C117.3	3	1	2	2	-	1	1	-	-	-	-	-	3	2	1
C117.4	3	2	2	2	-	1	1	-	-	-	-	1	2	2	1
C117.5	3	1	2	2	1	1	1	1	-	-	-	1	2	2	1
C117	3.00	1.40	1.80	1.80	1.00	1.00	1.00	1.00	-	-	-	1.00	2.40	1.80	1.00
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>1.40</b>	<b>1.80</b>	<b>1.80</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.00</b>	<b>2.40</b>	<b>1.80</b>	<b>1.00</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; II</b>
<b>Course Code &amp; Name:</b>	<b>C118 &amp; CS6212 - Programming and Data Structures Laboratory- I</b>
<b>Year of Study :</b>	<b>2016-2017</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C118.1	3	3	3	2	2	2	-	1	-	-	-	-	3	2	1
C118.2	3	3	2	2	2	-	-	1	-	-	-	-	3	2	1
C118.3	3	3	2	1	2	-	-	1	-	-	-	-	3	2	1
C118.4	3	3	1	-	2	-	-	-	-	-	-	-	3	2	1
C118.5	3	3	1	-	2	-	-	-	-	-	-	-	3	1	1
C118	3.00	3.00	1.80	1.67	2.00	2.00	-	1.00	-	-	-	-	3.00	1.80	1.00
PO ATTAINMENT	3.00	3.00	1.80	1.67	2.00	2.00	-	1.00	-	-	-	-	3.00	1.80	1.00

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	



**Dr. J.SUNDARARAJAN,**  
B.E., M.Tech., Ph.D.,  
Principal  
N.P.R. College of Engineering & Technology  
Natham, Dindigul (Dt) - 624 401.





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## SEMESTER 3

<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>I &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C201 &amp; MA6351 - Transforms and Partial differential equations</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C201.1	3	3	2	2	1	1	2	1	2	1	2	-	3	1	1
C201.2	3	3	2	2	1	2	1	-	1	-	2	-	3	2	1
C201.3	3	3	2	2	-	1	-	-	1	-	2	-	3	1	1
C201.4	3	2	1	2	1	-	1	-	-	-	3	-	2	2	2
C201.5	3	3	2	2	1	-	1	-	2	1	2	-	3	1	2
C201	3.00	2.80	1.80	2.00	1.00	1.33	1.25	1.00	1.50	1.00	2.20	-	2.80	1.40	1.40
<b>PO ATTAINMENT</b>	<b>2.20</b>	<b>2.05</b>	<b>1.32</b>	<b>1.47</b>	<b>0.73</b>	<b>0.98</b>	<b>0.92</b>	<b>0.73</b>	<b>1.10</b>	<b>0.73</b>	<b>1.61</b>	<b>-</b>	<b>2.05</b>	<b>1.03</b>	<b>1.03</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	0	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C202 &amp; CS6301 - Programming and Data Structures II</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C202.1	3	3	1	1	2	-	-	-	-	-	-	1	3	1	1
C202.2	3	3	2	2	2	-	-	-	-	-	-	1	3	2	1
C202.3	3	3	2	2	2	-	-	-	-	-	-	1	3	2	1
C202.4	3	1	-	-	-	-	-	-	-	-	-	-	3	1	-
C202.5	3	1	2	2	2	-	-	-	-	-	-	1	3	2	1
<b>C202</b>	<b>3.00</b>	<b>2.20</b>	<b>1.75</b>	<b>1.75</b>	<b>2.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.00</b>	<b>3.00</b>	<b>1.60</b>	<b>1.00</b>
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>2.20</b>	<b>1.75</b>	<b>1.75</b>	<b>2.00</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.00</b>	<b>3.00</b>	<b>1.60</b>	<b>1.00</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
CO6	0	0	0	0.00	3
<b>INTERNAL/UNIV ATTAINMENTS</b>				<b>3.00</b>	<b>3.00</b>
<b>WEIGHTAGE</b>				<b>20%</b>	<b>80%</b>
<b>CO ATTAINMENT FOR THE SUBJECT</b>				<b>0.60</b>	<b>2.40</b>
<b>FINAL CO ATTAINMENT FOR THE SUBJECT</b>				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C203 &amp; CS6302 - Database Management Systems</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C203.1	3	3	-	-	-	-	-	-	-	-	-	-	3	3	-
C203.2	3	3	-	1	-	1	-	-	-	-	-	-	3	2	1
C203.3	3	3	-	-	-	1	-	-	-	-	-	-	3	2	1
C203.4	3	3	-	-	-	-	-	-	-	-	-	-	3	1	-
C203.5	3	3	-	2	-	2	1	-	-	-	-	-	3	2	2
C203	3.00	3.00	-	1.50	-	1.33	1.00	-	-	-	-	-	3.00	2.00	1.33
PO ATTAINMENT	3.00	3.00	-	1.50	-	1.33	1.00	-	-	-	-	-	3.00	2.00	1.33

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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**Programme: B.E. Computer Science and Engineering**

**Year & Sem: II & III**

**Course Code & Name: C204 & CS6303 - Computer Architecture**

**Year of Study : 2017 - 2018**

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C204.1	3	2	1	1	-	-	-	-	-	-	-	-	3	1	-
C204.2	3	2	1	1	-	-	-	-	-	-	-	-	3	1	-
C204.3	3	3	2	2	-	-	-	-	-	-	-	-	3	2	-
C204.4	3	3	2	1	-	1	-	-	-	-	-	1	3	2	-
C204.5	3	3	2	1	-	-	-	-	-	-	-	-	3	2	1
C204	3.00	2.60	1.60	1.20	-	1.00	-	-	-	-	-	1.00	3.00	1.60	1.00
PO ATTAINMENT	<b>2.20</b>	<b>1.91</b>	<b>1.17</b>	<b>0.88</b>	-	<b>0.73</b>	-	-	-	-	-	<b>0.73</b>	<b>2.20</b>	<b>1.17</b>	<b>0.73</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C205 &amp; CS6304 - Analog and Digital Communication</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C205.1	2	1	1	1	-	-	-	-	-	-	-	-	2	1	-
C205.2	2	1	1	1	-	-	-	-	-	-	-	-	2	1	-
C205.3	2	1	1	1	-	-	-	-	-	-	-	-	2	1	-
C205.4	3	2	2	2	-	-	-	-	-	-	-	-	3	2	1
C205.5	3	1	-	-	-	-	-	-	-	-	-	-	3	1	-
C205	2.40	1.20	1.25	1.25	-	-	-	-	-	-	-	-	2.40	1.20	1.00
PO ATTAINMENT	2.40	1.20	1.25	1.25	-	-	-	-	-	-	-	-	2.40	1.20	1.00

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C206 &amp; GE6351 – Environmental Science and Engineering</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C206.1	-	2	-	-	-	2	3	2	-	-	-	-	-	2	1
C206.2	-	-	3	2	-	2	3	2	-	-	-	-	-	2	1
C206.3	-	-	-	-	-	2	3	-	-	-	-	-	-	2	1
C206.4	-	-	-	-	-	1	3	-	-	-	-	-	-	2	1
C206.5	-	-	-	-	-	3	3	2	-	-	-	-	-	2	2
C206	-	2.00	3.00	2.00	-	2.00	3.00	2.00	-	-	-	-	-	2.00	1.20
PO ATTAINMENT	-	1.47	2.20	1.47	-	1.47	2.20	1.47	-	-	-	-	-	1.47	0.88

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				2.20	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C207 &amp; CS6311 - Programming and Data Structure Laboratory II</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C207.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C207.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C207.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C207.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C207.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
<b>C207</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	2
CO2	0	0	3	3.00	2
CO3	0	0	3	3.00	2
CO4	0	0	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; III</b>
<b>Course Code &amp; Name:</b>	<b>C208 &amp; CS6312 - Database Management Systems Laboratory</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C208.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C208.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C208.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C208.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C208.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C208	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
CO ATTAINMENT	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	



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## SEMESTER 4

<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C209 &amp; MA6453 - Probability Queuing Theory</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C209.1	2	1	-	2	-	-	-	-	-	-	-	2	2	1	-
C209.2	2	1	-	1	-	-	-	-	-	-	-	-	1	1	-
C209.3	2	1	-	1	-	-	-	-	-	-	-	1	1	1	-
C209.4	2	1	-	1	-	-	-	-	-	-	-	1	-	-	-
C209.5	2	1	-	1	-	-	-	-	-	-	-	1	1	2	-
C209	2.00	1.00	-	1.20	-	-	-	-	-	-	-	1.25	1.25	1.25	-
<b>PO ATTAINMENT</b>	<b>0.93</b>	<b>0.47</b>	<b>-</b>	<b>0.56</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.58</b>	<b>0.58</b>	<b>0.58</b>	<b>-</b>

### RUBRICS

26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

CI01	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	0	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





# NPR College of Engineering & Technology

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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C210 &amp; CS6551 - Computer Networks</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C210.1	3	2	2	1	-	-	-	-	-	-	-	2	3	1	1
C210.2	3	2	2	2	1	-	-	-	-	-	1	2	3	2	1
C210.3	3	3	2	2	1	-	-	-	1	1	1	3	3	2	1
C210.4	3	3	2	1	-	-	-	-	-	-	1	3	3	2	1
C210.5	3	3	3	3	2	2	1	2	2	2	2	3	3	3	2
C210	3.00	2.60	2.20	1.80	1.33	2.00	1.00	2.00	1.50	1.50	1.25	2.60	3.00	2.00	1.20
<b>PO ATTAINMENT</b>	<b>2.20</b>	<b>1.91</b>	<b>1.61</b>	<b>1.32</b>	<b>0.98</b>	<b>1.47</b>	<b>0.73</b>	<b>1.47</b>	<b>1.10</b>	<b>1.10</b>	<b>0.92</b>	<b>1.91</b>	<b>2.20</b>	<b>1.47</b>	<b>0.88</b>

### RUBRICS

26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	



	<h2 style="margin: 0;">NPR College of Engineering &amp; Technology</h2> <p style="margin: 0;">NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.          Approved by AICTE, New Delhi &amp; Affiliated to Anna University, Chennai.          An ISO 9001:2015 Certified Institution.          Phone No: 04544- 246 500, 246501, 246502.          Website : www.nprcolleges.org, www.nprcet.org, Email:nprcetprincipal@nprcolleges.org</p>	
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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C211 &amp; CS6401 - Operating Systems</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C211.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C211.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C211.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C211.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C211.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C211	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C212 &amp; CS6402 - Design and Analysis Of Algorithm</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C212.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C212.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C212.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C212.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C212	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>1.47</b>	<b>1.47</b>	<b>1.47</b>	<b>2.20</b>	<b>-</b>	<b>1.32</b>	<b>1.32</b>	<b>1.32</b>	<b>2.20</b>	<b>2.20</b>	<b>-</b>	<b>1.47</b>	<b>0.73</b>	<b>-</b>	<b>-</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	



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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C213 &amp; EC6504 - Microprocessors and Microcontrollers</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C213.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C213.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C213.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C213.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C213.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C213	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>1.47</b>	<b>1.47</b>	<b>1.47</b>	<b>2.20</b>	<b>-</b>	<b>1.32</b>	<b>1.32</b>	<b>1.32</b>	<b>2.20</b>	<b>2.20</b>	<b>-</b>	<b>1.47</b>	<b>0.73</b>	<b>-</b>	<b>-</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C214 &amp; CS6403 - Software Engineering</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C214.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C214.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C214.3	-	1	2	-	-	2	2	2	3	3	-	2	1	-	-
C214.4	-	1	-	3	-	1	1	1	3	3	-	2	1	-	-
C214.5	-	1	-	-	-	2	2	2	3	3	-	2	1	-	-
C214	2.00	1.25	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>0.93</b>	<b>0.58</b>	<b>0.93</b>	<b>1.40</b>	<b>-</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>1.40</b>	<b>1.40</b>	<b>-</b>	<b>0.93</b>	<b>0.47</b>	<b>-</b>	<b>-</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C215 &amp; CS6411 - Networks Laboratory</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C215.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C215.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C215.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C215.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C215.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C215	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	-	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	-	<b>2.00</b>	<b>1.00</b>	-	-

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C216 &amp; CS6412 - Microprocessors &amp; Microcontrollers Laboratory</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C216.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C216.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C216.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C216.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C216.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C216	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	







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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>II &amp; IV</b>
<b>Course Code &amp; Name:</b>	<b>C217 &amp; CS6413 - Operating Systems Laboratory</b>
<b>Year of Study :</b>	<b>2017 - 2018</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C217.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C217.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C217.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C217.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C217.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C217	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	-	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	-	<b>2.00</b>	<b>1.00</b>	-	-

RUBRICS	
26	60% OF STUDENT ABOVE 50% - 1 (LOW)
30	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
34	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



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## SEMESTER 5

**Programme: B.E. Computer Science and Engineering**

**Year & Sem: III & V**

**Course Code & Name: C301 & MA6566 - Discrete Mathematics**

**Year of Study : 2018 - 2019**

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C301.1	2	-	1	-	3	-	-	-	-	-	-	-	2	1	3
C301.2	3	3	2	-	1	-	-	-	-	-	-	-	2	1	1
C301.3	-	3	-	-	2	1	-	-	-	-	-	-	1	1	1
C301.4	-	-	-	1	-	-	3	2	-	-	-	-	1	1	2
C301.5	-	-	-	-	-	-	-	1	-	2	-	-	3	1	2
C301	2.50	3.00	1.50	1.00	2.00	1.00	3.00	1.50	-	2.00	-	-	1.80	1.00	1.80
PO ATTAINMENT	1.17	1.40	0.70	0.47	0.93	0.47	1.40	0.70	-	0.93	-	-	0.84	0.47	0.84

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	0	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				1.40	



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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C302 &amp; CS6501 - Internet Programming</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C302.1	3	3	1	1	2	-	-	-	-	-	-	1	3	1	1
C302.2	3	3	2	2	3	2	3	3	3	3	2	3	3	2	3
C302.3	3	3	2	2	3	2	-	-	-	-	2	3	3	2	2
C302.4	3	3	2	2	3	2	2	3	3	3	3	2	3	2	2
C302.5	3	3	2	2	3	-	-	-	-	-	2	2	3	2	2
C302	3.00	3.00	1.80	1.80	2.80	2.00	2.50	3.00	3.00	3.00	2.25	2.20	3.00	1.80	2.00
<b>PO ATTAINMENT</b>	<b>1.40</b>	<b>1.40</b>	<b>0.84</b>	<b>0.84</b>	<b>1.31</b>	<b>0.93</b>	<b>1.17</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.05</b>	<b>1.03</b>	<b>1.40</b>	<b>0.84</b>	<b>0.93</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





# NPR College of Engineering & Technology

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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C303 &amp; CS6502 - Object Oriented Analysis and Design</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C303.1	3	3	3	2	2	1	-	-	-	-	-	1	3	2	1
C303.2	3	3	3	2	-	1	1	-	-	-	-	-	3	2	-
C303.3	3	3	3	2	-	-	-	-	-	-	-	-	3	2	-
C303.4	3	3	2	1	-	2	1	-	-	-	-	2	3	1	2
C303.5	3	3	3	2	2	2	1	2	3	3	3	2	3	2	2
<b>C303</b>	<b>3.00</b>	<b>3.00</b>	<b>2.80</b>	<b>1.80</b>	<b>2.00</b>	<b>1.50</b>	<b>1.00</b>	<b>2.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>1.67</b>	<b>3.00</b>	<b>1.80</b>	<b>1.67</b>
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>3.00</b>	<b>2.80</b>	<b>1.80</b>	<b>2.00</b>	<b>1.50</b>	<b>1.00</b>	<b>2.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>1.67</b>	<b>3.00</b>	<b>1.80</b>	<b>1.67</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C304 &amp; CS6503 - Theory of Computation</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C304.1	3	3	2	1	-	-	-	-	-	-	-	3	1	-	-
C304.2	3	3	3	2	-	-	-	-	-	-	-	3	1	-	-
C304.3	3	3	3	2	-	-	-	-	-	-	-	3	1	-	-
C304.4	3	3	3	3	-	2	-	1	-	-	1	3	1	-	-
C304.5	3	3	2	3	-	1	-	1	-	-	1	1	1	-	-
<b>C304</b>	<b>3.00</b>	<b>3.00</b>	<b>2.60</b>	<b>2.20</b>	<b>-</b>	<b>1.50</b>	<b>-</b>	<b>1.00</b>	<b>-</b>	<b>-</b>	<b>1.00</b>	<b>2.60</b>	<b>1.00</b>	<b>-</b>	<b>-</b>
<b>PO ATTAINMENT</b>	<b>1.40</b>	<b>1.40</b>	<b>1.21</b>	<b>1.03</b>	<b>-</b>	<b>0.70</b>	<b>-</b>	<b>0.47</b>	<b>-</b>	<b>-</b>	<b>0.47</b>	<b>1.21</b>	<b>0.47</b>	<b>-</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	1
CO2	3	0	3	3.00	1
CO3	0	3	3	3.00	1
CO4	0	3	3	3.00	1
CO5	0	0	3	3.00	1
INTERNAL/UNIV ATTAINMENTS				3.00	1.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	0.80
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.40</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C305 &amp; CS6504 - Computer Graphics</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305.1	3	3	3	2	1	2	-	-	-	-	2	-	3	2	2
C305.2	3	3	3	2	2	2	-	-	-	-	1	-	3	2	2
C305.3	3	3	3	2	2	2	-	-	-	-	1	-	3	2	2
C305.4	3	3	3	2	2	2	-	-	2	2	2	1	3	2	2
C305.5	3	3	3	2	2	2	-	-	2	2	2	1	3	2	2
C305	3.00	3.00	3.00	2.00	1.80	2.00	-	-	2.00	2.00	1.60	1.00	3.00	2.00	2.00
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>2.00</b>	<b>1.80</b>	<b>2.00</b>	<b>-</b>	<b>-</b>	<b>2.00</b>	<b>2.00</b>	<b>1.60</b>	<b>1.00</b>	<b>3.00</b>	<b>2.00</b>	<b>2.00</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

CI01	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C306 &amp; CS6511 - Case Tools Laboratory</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C306.1	3	3	2	2	2	-	-	-	-	-	-	1	3	2	1
C306.2	3	3	1	1	3	-	-	-	-	-	-	3	3	1	3
C306.3	3	2	2	1	3	-	-	-	-	-	-	2	3	2	2
C306.4	3	3	2	2	3	2	1	3	3	1	1	3	3	2	2
C306.5	3	3	2	1	3	2	2	3	2	3	2	3	3	2	2
C306	3.00	2.80	1.80	1.40	2.80	2.00	1.50	3.00	2.50	2.00	1.50	2.40	3.00	1.80	2.00
PO ATTAINMENT	3.00	2.80	1.80	1.40	2.80	2.00	1.50	3.00	2.50	2.00	1.50	2.40	3.00	1.80	2.00

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C307 &amp; CS6512 - Internet Programming Laboratory</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C307.1	3	3	2	2	2	-	-	-	-	-	-	1	3	2	1
C307.2	3	3	1	1	3	-	-	-	-	-	-	3	3	1	3
C307.3	3	2	2	1	3	-	-	-	-	-	-	2	3	2	2
C307.4	3	3	2	2	3	2	1	3	3	1	1	3	3	2	2
C307.5	3	3	2	1	3	2	2	3	2	3	2	3	3	2	2
C307	3.00	2.80	1.80	1.40	2.80	2.00	1.50	3.00	2.50	2.00	1.50	2.40	3.00	1.80	2.00
PO ATTAINMENT	3.00	2.80	1.80	1.40	2.80	2.00	1.50	3.00	2.50	2.00	1.50	2.40	3.00	1.80	2.00

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	







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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; V</b>
<b>Course Code &amp; Name:</b>	<b>C308 &amp; CS6513 - Computer Graphics Laboratory</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C308.1	3	3	3	2	1	1	2	2	1	1	1	2	3	2	1
C308.2	3	3	3	2	1	1	2	2	1	1	1	1	3	2	1
C308.3	3	3	3	1	1	2	2	2	1	1	1	1	3	2	1
C308.4	3	3	3	2	2	2	2	2	1	1	1	2	3	2	2
C308.5	3	3	3	2	2	2	2	2	1	1	1	2	3	2	2
<b>C308</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>1.80</b>	<b>1.40</b>	<b>1.60</b>	<b>2.00</b>	<b>2.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.60</b>	<b>3.00</b>	<b>2.00</b>	<b>1.40</b>
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>1.80</b>	<b>1.40</b>	<b>1.60</b>	<b>2.00</b>	<b>2.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.00</b>	<b>1.60</b>	<b>3.00</b>	<b>2.00</b>	<b>1.40</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



**Dr. J.SUNDARARAJAN,**  
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 Principal  
 N.P.R. College of Engineering & Technology  
 Natham, Dindigul (Dt) - 624 401.



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## SEMESTER 6

**Programme: B.E. Computer Science and Engineering**

**Year & Sem: III & VI**

**Course Code & Name: C309 & CS6601 - Distributed Systems**

**Year of Study : 2018 - 2019**

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C309.1	3	3	2	1	1	-	-	-	-	-	-	1	3	2	1
C309.2	3	3	2	2	1	-	1	-	-	-	-	1	3	2	1
C309.3	3	3	3	2	2	1	1	1	2	2	2	1	3	2	1
C309.4	3	3	3	2	2	1	1	1	2	2	2	1	3	3	2
C309.5	3	3	1	1	1	1	2	1	-	-	-	1	3	3	2
C309	3.00	3.00	2.20	1.60	1.40	1.00	1.25	1.00	2.00	2.00	2.00	1.00	3.00	2.40	1.40
PO ATTAINMENT	3.00	3.00	2.20	1.60	1.40	1.00	1.25	1.00	2.00	2.00	2.00	1.00	3.00	2.40	1.40

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	0	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
CO6	0	0	0	0.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





# NPR College of Engineering & Technology

NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.  
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Website : [www.nprcolleges.org](http://www.nprcolleges.org), [www.nprcet.org](http://www.nprcet.org), Email: [nprcetprincipal@nprcolleges.org](mailto:nprcetprincipal@nprcolleges.org)



<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C310 &amp; IT6601 - Mobile Computing</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C310.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C310.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C310.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C310.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C310.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C310	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
CO ATTAINMENT	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C311 &amp; CS6660 - Compiler Design</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C311.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C311.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C311.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C311.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
<b>C311</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	



 <p><b>NPR</b> Reach the Star</p>	<h1>NPR College of Engineering &amp; Technology</h1> <p>NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.          Approved by AICTE, New Delhi &amp; Affiliated to Anna University, Chennai.          An ISO 9001:2015 Certified Institution.          Phone No: 04544- 246 500, 246501, 246502.          Website : www.nprcolleges.org, www.nprcet.org, Email:nprcetprincipal@nprcolleges.org</p>	
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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C312 &amp; IT6502 - Digital Signal Processing</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C312.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C312.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C312.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C312.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C312.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C312	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	1.47	1.47	1.47	2.20	-	1.32	1.32	1.32	2.20	2.20	-	1.47	0.73	-	-

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C313 &amp; CS6659 - Artificial Intelligence</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

COURSE OUTCOME	CO Vs PO														
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C313.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C313.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C313.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C313.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C313.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C313	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>1.47</b>	<b>1.47</b>	<b>1.47</b>	<b>2.20</b>	<b>-</b>	<b>1.32</b>	<b>1.32</b>	<b>1.32</b>	<b>2.20</b>	<b>2.20</b>	<b>-</b>	<b>1.47</b>	<b>0.73</b>	<b>-</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	2
CO2	3	0	3	3.00	2
CO3	0	3	3	3.00	2
CO4	0	3	3	3.00	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				3.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.20</b>	



	<h1 style="margin: 0;">NPR College of Engineering &amp; Technology</h1> <p style="margin: 0;">NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.          Approved by AICTE, New Delhi &amp; Affiliated to Anna University, Chennai.          An ISO 9001:2015 Certified Institution.          Phone No: 04544- 246 500, 246501, 246502.          Website : <a href="http://www.nprcolleges.org">www.nprcolleges.org</a>, <a href="http://www.nprcet.org">www.nprcet.org</a>, Email:<a href="mailto:nprcetprincipal@nprcolleges.org">nprcetprincipal@nprcolleges.org</a></p>	
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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C314 &amp; GE6757 - Total Quality Management</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C314.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C314.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C314.3	-	1	2	-	-	2	2	2	3	3	-	2	1	-	-
C314.4	-	1	-	3	-	1	1	1	3	3	-	2	1	-	-
C314.5	-	1	-	-	-	2	2	2	3	3	-	2	1	-	-
<b>C314</b>	<b>2.00</b>	<b>1.25</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>1.25</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	3	3.00	3
CO2	3	0	3	3.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C315 &amp; CS6611 - Mobile Application Development Laboratory</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C315.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C315.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C315.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C315.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C315.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
<b>C315</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	







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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C316 &amp; CS6612 - Compiler Laboratory</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C316.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C316.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C316.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C316.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C316.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
<b>C316</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>
<b>PO ATTAINMENT</b>	<b>2.00</b>	<b>2.00</b>	<b>2.00</b>	<b>3.00</b>	<b>-</b>	<b>1.80</b>	<b>1.80</b>	<b>1.80</b>	<b>3.00</b>	<b>3.00</b>	<b>-</b>	<b>2.00</b>	<b>1.00</b>	<b>-</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO6	0	0	0	0.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





# NPR College of Engineering & Technology

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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>III &amp; VI</b>
<b>Course Code &amp; Name:</b>	<b>C317 &amp; GE6674 - Communication and Soft Skills Laboratory</b>
<b>Year of Study :</b>	<b>2018 - 2019</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C317.1	-	-	-	-	-	-	-	-	3	3	-	2	1	-	-
C317.2	-	-	-	-	-	-	-	-	3	3	-	2	1	-	-
C317.3	-	-	-	-	-	-	-	-	3	3	-	2	1	-	-
C317.4	-	-	-	-	-	-	-	-	3	3	-	2	1	-	-
C317.5	-	-	-	-	-	-	-	-	3	3	-	2	1	-	-
C317	-	-	-	-	-	-	-	-	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	-	-	-	-	-	-	-	-	3.00	3.00	-	2.00	1.00	-	-

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
31	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
35	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	



**Dr. J.SUNDARARAJAN,**  
B.E., M.Tech., Ph.D.,  
Principal  
N.P.R. College of Engineering & Technology  
Natham, Dindigul (Dt) - 624 401.



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## SEMESTER 7

<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C401 &amp; CS6701 - Cryptography and Network Security</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C401.1	3	3	2	1	1	-	-	-	-	-	-	1	3	2	1
C401.2	3	3	2	2	1	-	1	-	-	-	-	1	3	2	1
C401.3	3	3	3	2	2	1	1	1	2	2	2	1	3	2	1
C401.4	3	3	3	2	2	1	1	1	2	2	2	1	3	3	2
C401.5	3	3	1	1	1	1	2	1	-	-	-	1	3	3	2
C401	3.00	3.00	2.20	1.60	1.40	1.00	1.25	1.00	2.00	2.00	2.00	1.00	3.00	2.40	1.40
PO ATTAINMENT	<b>1.80</b>	<b>1.80</b>	<b>1.32</b>	<b>0.96</b>	<b>0.84</b>	<b>0.60</b>	<b>0.75</b>	<b>0.60</b>	<b>1.20</b>	<b>1.20</b>	<b>1.20</b>	<b>0.60</b>	<b>1.80</b>	<b>1.44</b>	<b>0.84</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	1	0	1	1.00	2
CO2	1	0	1	1.00	2
CO3	0	1	0	1.00	2
CO4	0	1	1	1.00	2
CO5	0	0	1	1.00	2
INTERNAL/UNIV ATTAINMENTS				1.00	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.20	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.80</b>	





# NPR College of Engineering & Technology

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Phone No: 04544- 246 500, 246501, 246502.

Website : www.nprcolleges.org, www.nprcet.org, Email:nprcetprincipal@nprcolleges.org



<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C402 &amp; CS6702 - Graph Theory and Applications</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C402.1	3	3	3	2	-	-	-	-	-	-	-	-	3	3	-
C402.2	3	3	2	2	-	-	-	-	-	-	-	-	3	3	-
C402.3	3	3	2	2	-	-	-	-	-	-	-	-	3	3	-
C402.4	3	3	2	2	-	-	-	-	-	-	-	-	3	3	-
C402.5	3	3	3	3	2	1	1	1	1	1	1	3	3	2	2
C402	3.00	3.00	2.40	2.20	2.00	1.00	1.00	1.00	1.00	1.00	1.00	3.00	3.00	2.80	2.00
<b>PO ATTAINMENT</b>	<b>2.12</b>	<b>2.12</b>	<b>1.70</b>	<b>1.55</b>	<b>1.41</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>0.71</b>	<b>2.12</b>	<b>2.12</b>	<b>1.98</b>	<b>1.41</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	2	0	3	2.50	2
CO2	2	0	3	2.50	2
CO3	0	2	3	2.50	2
CO4	0	2	3	2.50	2
CO5	0	0	3	3.00	2
INTERNAL/UNIV ATTAINMENTS				2.60	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.52	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.12</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C403 &amp; CS6703 - Grid and Cloud Computing</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C403.1	3	3	2	1	-	-	-	-	-	-	-	-	3	2	-
C403.2	2	3	2	1	-	-	-	-	-	-	-	-	2	2	-
C403.3	3	2	2	1	3	-	-	-	-	-	-	-	3	2	-
C403.4	3	3	3	2	3	3	2	2	1	1	2	2	3	2	-
C403.5	3	3	2	2	2	-	-	-	-	-	-	-	3	2	-
C403	2.80	2.80	2.20	1.40	2.67	3.00	2.00	2.00	1.00	1.00	2.00	2.00	2.80	2.00	-
<b>PO ATTAINMENT</b>	<b>2.43</b>	<b>2.43</b>	<b>1.91</b>	<b>1.21</b>	<b>2.31</b>	<b>2.60</b>	<b>1.73</b>	<b>1.73</b>	<b>0.87</b>	<b>0.87</b>	<b>1.73</b>	<b>1.73</b>	<b>2.43</b>	<b>1.73</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	1	0	1	1.00	3
CO2	1	0	1	1.00	3
CO3	0	1	1	1.00	3
CO4	0	1	1	1.00	3
CO5	0	0	1	1.00	3
INTERNAL/UNIV ATTAINMENTS				1.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.20	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.60</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C404 &amp; CS6704 - Resource Management Techniques</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C404.1	3	3	3	3	-	2	2	1	1	1	1	3	3	3	2
C404.2	3	3	3	3	1	2	-	-	-	-	-	-	3	3	1
C404.3	3	3	3	2	-	3	-	-	-	-	-	1	3	2	2
C404.4	3	3	-	2	-	1	-	-	-	-	-	1	3	1	1
C404.5	3	3	3	3	3	2	3	3	2	2	3	3	3	3	3
C404	3.00	3.00	3.00	2.60	2.00	2.00	2.50	2.00	1.50	1.50	2.00	2.00	3.00	2.40	1.80
<b>PO ATTAINMENT</b>	<b>1.92</b>	<b>1.92</b>	<b>1.92</b>	<b>1.66</b>	<b>1.28</b>	<b>1.28</b>	<b>1.60</b>	<b>1.28</b>	<b>0.96</b>	<b>0.96</b>	<b>1.28</b>	<b>1.28</b>	<b>1.92</b>	<b>1.54</b>	<b>1.15</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	1	0	2	1.50	2
CO2	1	0	2	1.50	2
CO3	0	1	2	1.50	2
CO4	0	1	2	1.50	2
CO5	0	0	2	2.00	2
INTERNAL/UNIV ATTAINMENTS				1.60	2.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.32	1.60
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>1.92</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C405 &amp; IT6801 - Service Oriented Architecture</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C405.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C405.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C405.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C405.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C405.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C405	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
<b>PO ATTAINMENT</b>	<b>1.95</b>	<b>1.95</b>	<b>1.95</b>	<b>2.92</b>	<b>-</b>	<b>1.75</b>	<b>1.75</b>	<b>1.75</b>	<b>2.92</b>	<b>2.92</b>	<b>-</b>	<b>1.95</b>	<b>0.97</b>	<b>-</b>	<b>-</b>

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	1	0	3	2.00	3
CO2	1	0	3	2.00	3
CO3	0	3	3	3.00	3
CO4	0	3	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				2.60	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.52	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>2.92</b>	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C406 &amp; CS6007 - Information Retrieval</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C406.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C406.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C406.3	-	1	2	-	-	2	2	2	3	3	-	2	1	-	-
C406.4	-	1	-	3	-	1	1	1	3	3	-	2	1	-	-
C406.5	-	1	-	-	-	2	2	2	3	3	-	2	1	-	-
C406	2.00	1.25	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	1.87	1.17	1.87	2.80	-	1.68	1.68	1.68	2.80	2.80	-	1.87	0.93	-	-

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	1	0	2	1.50	3
CO2	1	0	2	1.50	3
CO3	0	3	2	2.50	3
CO4	0	3	2	2.50	3
CO5	0	0	2	2.00	3
INTERNAL/UNIV ATTAINMENTS				2.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.40	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				2.80	







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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C407 &amp; CS6711 - Security Laboratory</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C407.1	3	3	3	2	2	2	-	2	2	2	-	3	3	2	2
C407.2	3	3	3	3	2	3	-	2	2	2	-	3	3	3	3
C407.3	3	3	3	3	3	3	-	3	2	2	-	3	3	3	3
C407.4	3	3	3	3	3	3	-	3	3	2	-	3	3	3	3
C407.5	3	3	2	1	3	3	-	2	2	1	-	3	3	2	3
C407	3.00	3.00	2.80	2.40	2.60	2.80	-	2.40	2.20	1.80	-	3.00	3.00	2.60	2.80
<b>PO ATTAINMENT</b>	<b>3.00</b>	<b>3.00</b>	<b>2.80</b>	<b>2.40</b>	<b>2.60</b>	<b>2.80</b>	<b>-</b>	<b>2.40</b>	<b>2.20</b>	<b>1.80</b>	<b>-</b>	<b>3.00</b>	<b>3.00</b>	<b>2.60</b>	<b>2.80</b>

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



 <b>NPR</b> <i>Reach the Star</i>	<h1>NPR College of Engineering &amp; Technology</h1> <p>NPR Nagar, Natham, Dindigul - 624401, Tamil Nadu, India.          Approved by AICTE, New Delhi &amp; Affiliated to Anna University, Chennai.          An ISO 9001:2015 Certified Institution.          Phone No: 04544- 246 500, 246501, 246502.          Website : www.nprcolleges.org, www.nprcet.org, Email:nprcetprincipal@nprcolleges.org</p>	
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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VII</b>
<b>Course Code &amp; Name:</b>	<b>C408 &amp; CS6712 - Grid and Cloud Computing Laboratory</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C408.1	3	3	3	3	3	2	1	2	2	2	2	3	3	3	3
C408.2	3	3	3	3	3	2	2	3	3	3	3	3	3	3	3
C408.3	3	3	3	3	3	2	1	2	2	2	2	3	3	3	3
C408.4	3	3	3	3	3	2	3	3	3	3	3	3	3	3	3
C408.5	3	3	3	3	3	3	3	2	2	2	2	3	3	3	3
C408	3.00	3.00	3.00	3.00	3.00	2.20	2.00	2.40	2.40	2.40	2.40	3.00	3.00	3.00	3.00
PO ATTAINMENT	3.00	3.00	3.00	3.00	3.00	2.20	2.00	2.40	2.40	2.40	2.40	3.00	3.00	3.00	3.00

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	



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 Principal  
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## SEMESTER 8

<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VIII</b>
<b>Course Code &amp; Name:</b>	<b>C409 &amp; CS6801 - Multicore Architecture &amp; Programming</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

### CO Vs PO

COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C409.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C409.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C409.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C409.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C409.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C409	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-

### RUBRICS

27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	0	3.00	3
CO2	3	0	0	3.00	3
CO3	0	3	0	3.00	3
CO4	0	3	0	3.00	3
CO5	0	0	0	0.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				<b>3.00</b>	





# NPR College of Engineering & Technology

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Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai.

An ISO 9001:2015 Certified Institution.

Phone No: 04544- 246 500, 246501, 246502.

Website : [www.nprcolleges.org](http://www.nprcolleges.org), [www.nprcet.org](http://www.nprcet.org), Email [nprcetprincipal@nprcolleges.org](mailto:nprcetprincipal@nprcolleges.org)



<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VIII</b>
<b>Course Code &amp; Name:</b>	<b>C410 &amp; CS6008 - Human Computer Interaction</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C410.1	2	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C410.2	2	2	-	-	-	2	2	2	3	3	-	2	1	-	-
C410.3	-	-	2	-	-	2	2	2	3	3	-	2	1	-	-
C410.4	-	-	-	3	-	1	1	1	3	3	-	2	1	-	-
C410.5	-	-	-	-	-	2	2	2	3	3	-	2	1	-	-
C410	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
PO ATTAINMENT	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

CI01	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	0	3.00	3
CO2	3	0	0	3.00	3
CO3	0	3	0	3.00	3
CO4	0	3	0	3.00	3
CO5	0	0	0	0.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VIII</b>
<b>Course Code &amp; Name:</b>	<b>C411 &amp; GE6075 - Professional Ethics in Engineering</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C411.1	3	3	-	1	-	-	1	2	3	-	-	-	3	1	-
C411.2	-	3	-	3	-	3	1	-	3	3	-	2	-	2	2
C411.3	-	-	2	3	3	-	-	3	3	3	1	2	-	3	2
C411.4	-	-	3	-	-	-	3	3	3	3	2	3	-	3	3
C411.5	-	-	-	-	-	-	-	-	3	3	-	3	-	-	3
C411	3.00	3.00	2.50	2.33	3.00	3.00	1.67	2.67	3.00	3.00	1.50	2.50	3.00	2.25	2.50
PO ATTAINMENT	3.00	3.00	2.50	2.33	3.00	3.00	1.67	2.67	3.00	3.00	1.50	2.50	3.00	2.25	2.50

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

CI01	TEST1	TEST2	TEST3	INT	UNIV
CO1	3	0	0	3.00	3
CO2	3	0	0	3.00	3
CO3	0	3	0	3.00	3
CO4	0	3	0	3.00	3
CO5	0	0	0	0.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	





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<b>Programme: B.E. Computer Science and Engineering</b>	
<b>Year &amp; Sem:</b>	<b>IV &amp; VIII</b>
<b>Course Code &amp; Name:</b>	<b>C412 &amp; CS6811 - Project Work</b>
<b>Year of Study :</b>	<b>2019 - 2020</b>

CO Vs PO															
COURSE OUTCOME	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C412.1	3	3	-	1	-	-	1	2	3	-	-	-	3	1	-
C412.2	-	3	-	3	-	3	1	-	3	3	-	2	-	2	2
C412.3	-	-	2	3	3	-	-	3	3	3	1	2	-	3	2
C412.4	-	-	3	-	-	-	3	3	3	3	2	3	-	3	3
C412.5	-	-	-	-	-	-	-	-	3	3	-	3	-	-	3
C412.6	-	-	-	-	-	-	-	-	-	-	-	-	3	3	2
C412	3.00	3.00	2.50	2.33	3.00	3.00	1.67	2.67	3.00	3.00	1.50	2.50	3.00	2.40	2.40
PO ATTAINMENT	3.00	3.00	2.50	2.33	3.00	3.00	1.67	2.67	3.00	3.00	1.50	2.50	3.00	2.40	2.40

RUBRICS	
27	60% OF STUDENT ABOVE 50% - 1 (LOW)
32	70% OF STUDENT ABOVE 50% - 2 (MEDIUM)
36	80% OF STUDENT ABOVE 50% - 3 (HIGH)

C101	TEST1	TEST2	TEST3	INT	UNIV
CO1	0	0	3	3.00	3
CO2	0	0	3	3.00	3
CO3	0	0	3	3.00	3
CO4	0	0	3	3.00	3
CO5	0	0	3	3.00	3
CO6	0	0	3	3.00	3
INTERNAL/UNIV ATTAINMENTS				3.00	3.00
WEIGHTAGE				20%	80%
CO ATTAINMENT FOR THE SUBJECT				0.60	2.40
FINAL CO ATTAINMENT FOR THE SUBJECT				3.00	



**Dr. JSUNDARARAJAN,**  
B.E., M.Tech., Ph.D.,  
Principal

N.P.R. College of Engineering & Technology  
Natham, Dindigul (Dt) - 624 401.

### 7. CSE Course attainment for all the subjects (Regulation 2013)

S. NO.	COURSE CODE	COURSE NAME	INTERNAL EXAMINATION ATTAINMENT VALUE	UNIVERSITY EXAMINATION ATTAINMENT VALUE	CO ATTAINMENT (100%)	PERCENT AGE OF ATTAINMENT
1.	C101	Technical English - I	0.60	2.40	3.00	100%
2.	C102	Mathematics - I	0.60	2.40	3.00	100%
3.	C103	Engineering Physics - I	0.60	2.40	3.00	100%
4.	C104	Engineering Chemistry - I	0.60	2.40	3.00	100%
5.	C105	Computer Programming	0.60	2.40	3.00	100%
6.	C106	Engineering Graphics	0.60	2.40	3.00	100%
7.	C107	Computer Practices Laboratory	0.60	2.40	3.00	100%
8.	C108	Engineering Practices Laboratory	0.60	2.40	3.00	100%
9.	C109	Physics and Chemistry Laboratory	0.60	2.40	3.00	100%
10.	C110	Technical English - II	0.60	2.40	3.00	100%
11.	C111	Mathematics - II	0.60	0.80	1.40	46.66%
12.	C112	Engineering Physics - II	0.60	0.80	1.40	46.66%
13.	C113	Engineering Chemistry - II	0.60	0.80	1.40	46.66%
14.	C114	Digital Principles and System Design	0.60	0.80	1.40	46.66%
15.	C115	Programming and Data Structures I	0.60	0.80	1.40	46.66%
16.	C116	Physics and Chemistry Laboratory - II	0.60	2.40	3.00	100%
17.	C117	Digital Laboratory	0.60	2.40	3.00	100%
18.	C118	Programming and Data Structures Laboratory I	0.60	2.40	3.00	100%
19.	C201	Transforms and Partial Differential Equations	0.60	1.60	2.20	73.33%
20.	C202	Programming and Data Structures II	0.60	2.40	3.00	100%
21.	C203	Database Management Systems	0.60	2.40	3.00	100%
22.	C204	Computer Architecture	0.60	1.60	2.20	73.33%
23.	C205	Analog And Digital	0.60	2.40	3.00	100%



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		Communication				
24.	C206	Environmental Science and Engineering	0.60	1.60	2.20	73.33%
25.	C207	Programming and Data Structure Laboratory	0.60	2.40	3.00	100%
26.	C208	Database Management Systems Laboratory	0.60	2.40	3.00	100%
27.	C209	Probability Queuing Theory	0.60	0.80	1.40	46.66%
28.	C210	Computer Networks	0.60	1.60	2.20	73.33%
29.	C211	Operating Systems	0.60	2.40	3.00	100%
30.	C212	Design and Analysis of Algorithm	0.60	1.60	2.20	73.33%
31.	C213	Microprocessors and Microcontrollers	0.60	1.60	2.20	73.33%
32.	C214	Software Engineering	0.60	0.80	1.40	46.66%
33.	C215	Networks Laboratory	0.60	2.40	3.00	100%
34.	C216	Microprocessors & Microcontrollers Laboratory	0.60	2.40	3.00	100%
35.	C217	Operating Systems Laboratory	0.60	2.40	3.00	100%
36.	C301	Discrete Mathematics	0.60	0.80	1.40	46.66%
37.	C302	Internet Programming	0.60	0.80	1.40	46.66%
38.	C303	Object Oriented Analysis and Design	0.60	2.40	3.00	100%
39.	C304	Theory of Computation	0.60	0.80	1.40	46.66%
40.	C305	Computer Graphics	0.60	2.40	3.00	100%
41.	C306	Case Tools Laboratory	0.60	2.40	3.00	100%
42.	C307	Internet Programming Laboratory	0.60	2.40	3.00	100%
43.	C308	Computer Graphics Laboratory	0.60	2.40	3.00	100%
44.	C309	Distributed Systems	0.60	2.40	3.00	100%
45.	C310	Mobile Computing	0.60	2.40	3.00	100%
46.	C311	Compiler Design	0.60	2.40	3.00	100%
47.	C312	Digital Signal Processing	0.60	1.60	2.20	73.33%
48.	C313	Artificial Intelligence	0.60	1.60	2.20	73.33%
49.	C314	Total Quality Management	0.60	2.40	3.00	100%
50.	C315	Mobile Application Development Laboratory	0.60	2.40	3.00	100%
51.	C316	Compiler Laboratory	0.60	2.40	3.00	100%







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52.	C317	Communication and Soft Skills Laboratory	0.60	2.40	3.00	100%
53.	C401	Cryptography and Network Security	0.20	1.60	1.80	60%
54.	C402	Graph Theory and Applications	0.52	1.60	2.12	70.66%
55.	C403	Grid and Cloud Computing	0.20	2.40	2.60	86.66%
56.	C404	Resource Management Techniques	0.32	1.60	1.92	64%
57.	C405	Service Oriented Architecture	0.52	2.40	2.92	97.33%
58.	C406	Information Retrieval	0.40	2.40	2.80	93.33%
59.	C407	Security Laboratory	0.60	2.40	3.00	100%
60.	C408	Grid and Cloud Computing Laboratory	0.60	2.40	3.00	100%
61.	C409	Multicore Architecture & Programming	0.60	2.40	3.00	100%
62.	C410	Human Computer Interaction	0.60	2.40	3.00	100%
63.	C411	Professional Ethics in Engineering	0.60	2.40	3.00	100%
64.	C412	Project Work	0.60	2.40	3.00	100%



**Dr. J.SUNDARARAJAN,**

B.E., M.Tech., Ph.D.,

Principal

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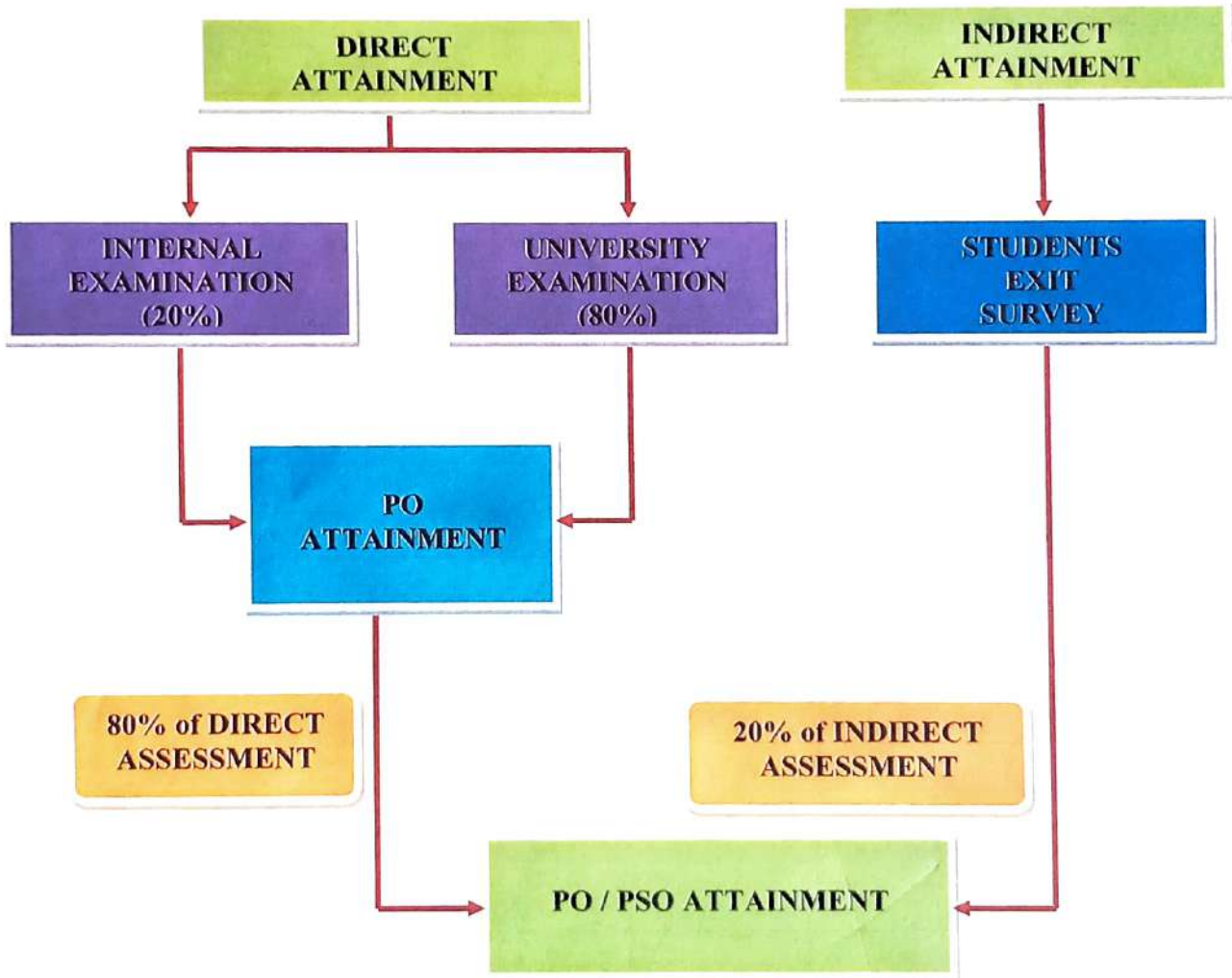


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## 8. Flow Chart for PO and PSO Attainment



*J.S.*  
**Dr. J.SUNDARARAJAN,**  
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Natham, Dindigul (Dt) - 624 401.

### 9. Calculation of POs and PSOs Attainment

<p><b>Attainment Level through Direct Assessment</b></p>	<p><b>=</b></p>	<p><b>(0.8 x Attainment level based on University Examination Marks ) + ( 0.2 x Attainment level based on Internal Assessment Marks )</b></p>
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#### PO Attainment Level for a Course

<p><b>PO Attainment</b></p>	<p><b>=</b></p>	<p><math>\frac{\text{CO Vs PO Average of the course}}{\text{Maximum Attainment Value}}</math></p>	<p><b>X</b></p>	<p><b>CO Attainment of the Course</b></p>
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#### Overall PO Attainment

<p><b>Overall PO Attainment</b></p>	<p><b>=</b></p>	<p><b>(80% of Direct Assessment) + (20% of Indirect Assessment)</b></p>
-------------------------------------	-----------------	---



  
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### 10. Indirect Assessment Tools

#### Students Exit Survey - Analysis

Program : B.E

Branch : Computer Science and Engineering

Survey Collected : 44

Academic Year : 2019-2020

POs	Questions	Excellent (4)	Good (3)	Satisfactory (2)	Fair (1)	Total Weightage	Maximum Weightage	Weightage based on three scale
PO1	The level of applying the knowledge in mathematics, science and Technology.	30	7	3	3	150	176	2.56
PO2	How much you are able to work effectively as an individual, a team member and team leader in an organization?	38	2	4	-	166	176	2.83
PO3	How was the effectiveness of Teaching Processes?	35	6	3	-	164	176	2.80
PO4	How you utilize the Computer and Internet Facilities in our college?	35	2	5	2	158	176	2.69
PO5	How was the college infrastructure?	38	6	-	-	170	176	2.90
PO6	How well your participation in Sports and Extra-Curricular activities in our College?	30	10	4	-	158	176	2.69
PO7	How were the placement facilities in our college?	39	5	-	-	171	176	2.91
PO8	How do you develop the Personality and Communication Skills?	28	10	4	2	152	176	2.59
PO9	How were the Library facilities in our College?	33	7	3		159	176	2.71
PO10	How was your ability to create, select and apply appropriate techniques, resources and modern engineering IT tools to complex engineering activities?	30	6	3	5	149	176	2.54





# NPR College of Engineering & Technology

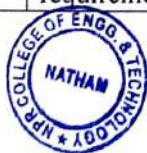
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PO11	How was your ability to design solutions for complex engineering problems and design system components that meet the specific needs for environmental considerations?	35	6	3	-	164	176	2.80
PO12	How was your ability to design solutions for complex engineering problems and design system components that meet the specific needs for environmental considerations?	30	6	3	5	149	176	2.54

PSOs	Questions	Excellent (4)	Good (3)	Satisfactory (2)	Fair (1)	Total Weightage	Maximum Weightage	Weightage based on three scale
PSO1	How was your ability to enrich the design and develop software in the field of Higher Studies and Research?	33	7	3	-	159	176	2.71
PSO2	How was your ability to demonstrate knowledge and understanding of engineering and management principles in multidisciplinary environments?	38	2	4	-	166	176	2.83
PSO3	How was your ability to plan, design, analyze and develop computer applications in the field of Cloud Computing / Networking / Internet of Things / Artificial Intelligence / Security to meet Industry requirements?	35	6	3	-	164	176	2.80



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# Student Exit Survey for 2016-2020 Batch

Email address \*

csejbalaji004@gmail.com

Name \*

BALAJI J

Register Number \*

920816104004

Branch \*

Computer Science and Engineering

1. The level of applying the knowledge in mathematics, science and Technology. \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair



  
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2. How much you are able to work effectively as an individual, a team member and team leader in an organization? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

3. How was the effectiveness of Teaching Processes? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

4. How you utilize the Computer and Internet Facilities in our college? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair



5. How was the college infrastructure? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

6. How well your participation in Sports and Extra-Curricular activities in our College? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

7. How were the placement facilities in our college? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair





8. How do you develop the Personality and Communication skills? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

9. How were the Library facilities in our College? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

10. How was your ability to create, select and apply appropriate techniques, resources and modern engineering IT tools to complex engineering activities? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair



11. How was your ability to design solutions for complex engineering problems and design system components that meet the specific needs for environmental considerations? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

12. How was your ability to design solutions for complex engineering problems and design system components that meet the specific needs for environmental considerations? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

13. How was your ability to enrich the design and develop software in the field of Higher Studies and Research? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair



14.How was your ability to demonstrate knowledge and understanding of engineering and management principles in multidisciplinary environments? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

15.How was your ability to plan, design, analyze and develop computer applications in the field of Cloud Computing / Networking / Internet of Things / Artificial Intelligence / Security to meet Industry requirements? \*

- a) Excellent
- b) Very Good
- c) Satisfactory
- d) Fair

This form was created inside of NPR COLLEGES.

Google Forms



  
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### 12. Direct and Indirect Assessment PO Attainment

PO ATTAINMENT															
SUBJECTWISE PO ATTAINMENT															
COURSE CODE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	PSO 3
C101	-	-	-	-	-	-	-	-	2.80	3.00	-	2.00	-	-	-
C102	3.00	3.00	2.00	1.00	2.00	3.00	-	-	3.00	2.00	3.00	3.00	1.40	1.50	1.00
C103	2.00	1.80	2.50	2.40	2.50	1.50	2.00	-	-	-	-	1.25	1.60	2.20	1.60
C104	3.00	1.40	2.00	2.40	2.20	1.40	1.80	1.00	1.75	2.00	2.00	2.20	2.00	1.75	1.80
C105	3.00	3.00	3.00	2.20	-	-	-	-	2.20	3.00	2.00	3.00	3.00	3.00	2.00
C106	1.00	1.00	2.00	1.00	-	-	-	-	-	2.00	-	2.00	2.00	1.80	-
C107	1.80	1.80	2.60	2.00	-	-	-	-	3.00	2.00	3.00	2.60	2.40	2.20	2.00
C108	1.00	1.00	2.00	1.00	-	-	-	-	-	2.00	-	2.00	1.00	-	-
C109	2.00	1.00	2.00	2.00	2.00	1.00	1.00	-	2.00	2.00	2.00	2.00	2.00	1.00	2.00
C110	-	-	-	-	-	-	-	-	3.00	3.00	-	2.00	-	-	-
C111	1.40	1.40	0.82	0.65	0.62	0.47	-	0.47	-	-	0.65	0.47	0.84	0.56	0.65
C112	1.12	0.84	1.17	1.12	1.17	0.70	0.93	-	-	-	-	0.58	1.21	0.82	0.84
C113	1.40	0.65	0.75	0.84	0.84	0.65	0.84	-	0.70	0.93	0.65	0.93	0.84	0.84	0.84
C114	1.40	0.93	0.84	0.84	0.47	0.47	0.47	0.47	-	-	-	0.47	1.12	0.84	0.47
C115	1.40	1.12	1.05	0.93	0.47	-	-	-	-	-	-	-	1.40	0.84	0.47
C116	1.67	2.00	1.33	1.00	1.33	1.67	1.33	1.00	1.67	1.00	1.33	1.67	1.67	2.00	1.33
C117	3.00	1.40	1.80	1.80	1.00	1.00	1.00	1.00	-	-	-	1.00	2.40	1.80	1.00
C118	3.00	3.00	1.80	1.67	2.00	2.00	-	1.00	-	-	-	-	3.00	1.80	1.00
C201	2.20	2.05	1.32	1.47	0.73	0.98	0.92	0.73	1.10	0.73	1.61	-	2.05	1.03	1.03
C202	3.00	2.20	1.75	1.75	2.00	-	-	-	-	-	-	1.00	3.00	1.60	1.00
C203	3.00	3.00	-	1.50	-	1.33	1.00	-	-	-	-	-	3.00	2.00	1.33
C204	2.20	1.91	1.17	0.88	-	0.73	-	-	-	-	-	0.73	2.20	1.17	0.73
C205	2.40	1.20	1.25	1.25	-	-	-	-	-	-	-	-	2.40	1.20	1.00
C206	-	1.47	2.20	1.47	-	1.47	2.20	1.47	-	-	-	-	-	1.47	0.88
C207	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C208	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-





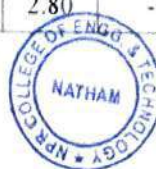
# NPR College of Engineering & Technology

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C209	0.93	0.47	-	0.56	-	-	-	-	-	-	-	0.58	0.58	0.58	-
C210	2.20	1.91	1.61	1.32	0.98	1.47	0.73	1.47	1.10	1.10	0.92	1.91	2.20	1.47	0.88
C211	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C212	1.47	1.47	1.47	2.20	-	1.32	1.32	1.32	2.20	2.20	-	1.47	0.73	-	-
C213	1.47	1.47	1.47	2.20	-	1.32	1.32	1.32	2.20	2.20	-	1.47	0.73	-	-
C214	0.93	0.58	0.93	1.40	-	0.84	0.84	0.84	1.40	1.40	-	0.93	0.47	-	-
C215	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C216	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C217	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C301	1.17	1.40	0.70	0.47	0.93	0.47	1.40	0.70	-	0.93	-	-	0.84	0.47	0.84
C302	1.40	1.40	0.84	0.84	1.31	0.93	1.17	1.40	1.40	1.40	1.05	1.03	1.40	0.84	0.93
C303	3.00	3.00	2.80	1.80	2.00	1.50	1.00	2.00	3.00	3.00	3.00	1.67	3.00	1.80	1.67
C304	1.40	1.40	1.21	1.03	-	0.70	-	0.47	-	-	0.47	1.21	0.47	-	-
C305	3.00	3.00	3.00	2.00	1.80	2.00	-	-	2.00	2.00	1.60	1.00	3.00	2.00	2.00
C306	3.00	2.80	1.80	1.40	2.80	2.00	1.50	3.00	2.50	2.00	1.50	2.40	3.00	1.80	2.00
C307	3.00	2.80	1.80	1.40	2.80	2.00	1.50	3.00	2.50	2.00	1.50	2.40	3.00	1.80	2.00
C308	3.00	3.00	3.00	1.80	1.40	1.60	2.00	2.00	1.00	1.00	1.00	1.60	3.00	2.00	1.40
C309	3.00	3.00	2.20	1.60	1.40	1.00	1.25	1.00	2.00	2.00	2.00	1.00	3.00	2.40	1.40
C310	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C311	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C312	1.47	1.47	1.47	2.20	-	1.32	1.32	1.32	2.20	2.20	-	1.47	0.73	-	-
C313	1.47	1.47	1.47	2.20	-	1.32	1.32	1.32	2.20	2.20	-	1.47	0.73	-	-
C314	2.00	1.25	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C315	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C316	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C317	-	-	-	-	-	-	-	-	3.00	3.00	-	2.00	1.00	-	-
C401	1.80	1.80	1.32	0.96	0.84	0.60	0.75	0.60	1.20	1.20	1.20	0.60	1.80	1.44	0.84
C402	2.12	2.12	1.70	1.55	1.41	0.71	0.71	0.71	0.71	0.71	0.71	2.12	2.12	1.98	1.41
C403	2.43	2.43	1.91	1.21	2.31	2.60	1.73	1.73	0.87	0.87	1.73	1.73	2.43	1.73	-
C404	1.92	1.92	1.92	1.66	1.28	1.28	1.60	1.28	0.96	0.96	1.28	1.28	1.92	1.54	1.15
C405	1.95	1.95	1.95	2.92	-	1.75	1.75	1.75	2.92	2.92	-	1.95	0.97	-	-
C406	1.87	1.17	1.87	2.80	-	1.68	1.68	1.68	2.80	2.80	-	1.87	0.93	-	-





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C407	3.00	3.00	2.80	2.40	2.60	2.80	-	2.40	2.20	1.80	-	3.00	3.00	2.60	2.80
C408	3.00	3.00	3.00	3.00	3.00	2.20	2.00	2.40	2.40	2.40	2.40	3.00	3.00	3.00	3.00
C409	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C410	2.00	2.00	2.00	3.00	-	1.80	1.80	1.80	3.00	3.00	-	2.00	1.00	-	-
C411	3.00	3.00	2.50	2.33	3.00	3.00	1.67	2.67	3.00	3.00	1.50	2.50	3.00	2.25	2.50
C412	3.00	3.00	2.50	2.33	3.00	3.00	1.67	2.67	3.00	3.00	1.50	2.50	3.00	2.40	2.40
DIRECT	2.10	1.91	1.84	1.90	1.68	1.53	1.46	1.55	2.32	2.22	1.58	1.74	1.70	1.63	1.39
INDIRECT	2.56	2.83	2.80	2.69	2.90	2.69	2.91	2.59	2.71	2.54	2.80	2.54	2.71	2.83	2.80
DIRECT 80%	1.68	1.53	1.47	1.52	1.35	1.23	1.17	1.24	1.85	1.78	1.27	1.39	1.36	1.30	1.12
INDIRECT 20%	0.51	0.57	0.56	0.54	0.58	0.54	0.58	0.52	0.54	0.51	0.56	0.51	0.54	0.57	0.56
PO ATTAINMENT	2.19	2.09	2.03	2.06	1.93	1.76	1.75	1.75	2.40	2.28	1.83	1.90	1.90	1.87	1.68

## PO ATTAINMENT

