



Indra Ganesan

COLLEGE OF ENGINEERING

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
Accredited by NAAC with 'B+' Grade, 2(f) & 12B Status Institution by UGC

IG Valley, Madurai Main Road, Manikandam, Tiruchirappalli - 620012

NAAC DOCUMENTS

QUALITY INDICATOR FRAME WORK

CRITERION – 2

TEACHING-LEARNING AND EVALUATION

SUBMITTED BY

IQAC

INTERNAL QUALITY ASSURANCE CELL
INDRA GANESAN COLLEGE OF ENGINEERING





Indra Ganesan
COLLEGE OF ENGINEERING
Madurai Main Road (NH-45B), Manikandam, Tiruchirappalli - 620 012
Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai
NAAC Accredited, 2(F) Status Institution by UGC



Criteria 2	Teaching-Learning and Evaluation	350
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Key Indicator-2.6 Student Performances and Learning Outcome (90)

2.6.1 Programme Outcomes (POs) and Course Outcomes (COs) for all programmes offered by the institution are stated and displayed on website

DEPARTMENT OF COMPUTER SCIENCE RG-2013

INDRA GANESAN COLLEGE OF ENGINEERING

IG Valley, Manikandam, Tiruchirappalli, Tamil Nadu – 620 012, India
(Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai-25)

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

REGULATION -2013

COURSE OUTCOMES

SEMESTER V

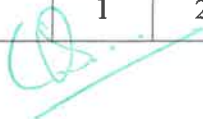
MA6566 DISCRETE MATHEMATICS

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C301.1	Have knowledge of the concepts needed to test the logic of a program.	1,2,3,4,5	1,2,3
C301.2	Have an understanding in identifying structures on many levels	1,2,3,4,5	1,2,3
C301.3	Be aware of a class of functions which transform a finite set into another finite set which relates to	1,2,3,4,5	1,2,3
C301.4	input and output functions in computer science.	1,2,3,4,5	1,2,3
C301.5	Be aware of the counting principles.	1,2,3,4,5	1,2,3
C301.6	Be exposed to concepts and properties of algebraic structures such as groups, rings and fields	1,2,3,4,5	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C301.1	3	2	1	1	1	-	-	-	-	-	-	-	1	3	3
C301.2	3	2	1	1	1	-	-	-	-	-	-	-	1	3	3
C301.3	3	2	1	1	1	-	-	-	-	-	-	-	1	2	2
C301.4	3	2	1	1	1	-	-	-	-	-	-	-	1	2	2
C301.5	3	2	1	1	1	-	-	-	-	-	-	-	1	1	1
C301.6	3	2	1	1	1	-	-	-	-	-	-	-	1	2	1
C301	3	2	1	1	1	-	-	-	-	-	-	-	1	2	1


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CS6501 INTERNET PROGRAMMING

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C302.1	Implement Java programs.	1,2,3,4,5,11,12	1,2,3
C302.2	Create a basic website using HTML and Cascading Style Sheets.	1,2,3,4,5,11,12	1,2,3
C302.3	Design and implement dynamic web page with validation using JavaScript objects and by	1,2,3,4,5,11,12	1,2,3
C302.4	Applying different event handling mechanisms.	1,2,3,4,5,11,12	1,2,3
C302.5	Design rich client presentation using AJAX.	1,2,3,4,5,11,12	1,2,3
C302.6	Design and implement simple web page in PHP, and to present data in XML format.	1,2,3,4,5,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C302.1	3	2	1	1	1	-	-	-	-	-	1	1	1	2	2
C302.2	3	2	1	1	1	-	-	-	-	-	1	1	1	2	2
C302.3	3	2	1	1	1	-	-	-	-	-	2	2	1	2	2
C302.4	3	2	1	1	1	-	-	-	-	-	2	2	1	2	2
C302.5	3	2	1	1	1	-	-	-	-	-	1	1	1	1	1
C302.6	3	2	1	1	1	-	-	-	-	-	1	1	1	2	1
C302	3	2	1	1	1	-	-	-	-	-	1	1	1	2	2

CS6502 OBJECT ORIENTED ANALYSIS AND DESIGN

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C303.1	Design and implement projects using OO concepts.	1,2,3,4,9,10,11,12	1,2,3
C303.2	Use the UML analysis and design diagrams.	1,2,3,4,5,9,10,11,12	1,2,3
C303.3	Apply appropriate design patterns.	1,2,3,4,5,9,10,11,12	1,2,3
C303.4	Create code from design.	1,2,3,4,9,10,11,12	1,2,3
C303.5	Compare and contrast various testing techniques.	1,2,3,4,5,9,10,11,12	1,2,3

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Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C305.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C305.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C305.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C305.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C305.5	3	2	1	1	1	-	-	-	1	3	1	1	1	1	1
C305.6	3	2	1	1	1	-	-	-	2	1	1	1	1	2	1
C305	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

CS6511 CASE TOOLS LABORATORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C306.1	Design and implement projects using OO concepts	1,2,3,4,9,10,11,12	1,2,3
C306.2	Use the UML analysis and design diagrams.	1,2,3,4,5,9,10,11,12	1,2,3
C306.3	Apply appropriate design patterns.	1,2,3,4,5,9,10,11,12	1,2,3
C306.4	Create code from design.	1,2,3,4,9,10,11,12	1,2,3
C306.5	Compare and contrast various testing techniques	1,2,3,4,5,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C306.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C306.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C306.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C306.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C306.5	3	2	1	1	1	-	-	-	1	3	1	1	1	1	1
C306	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

CS6512 INTERNET PROGRAMMING LABORATORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C307.1	Design Web pages using HTML/XML and style sheets	POs	PSOs
C307.2	Create user interfaces using Java frames and applets.	1,2,3,4,5,11,12	1,2,3

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Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C303.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C303.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C303.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C303.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C303.5	3	2	1	1	1	-	-	-	1	3	1	1	1	1	1
C303	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

CS6503 THEORY OF COMPUTATION

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C304.1	Design Finite State Machine, Pushdown Automata, and Turing Machine.	1,2, 12	1
C304.2	☒ Explain the Decidability or Undecidability of various problems	1.2.12	1

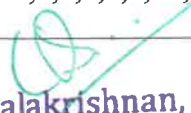
Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C304.1	3	2	-	-	-	-	-	-	-	-	2	1	1	-	-
C304.2	3	2	-	-	-	-	-	-	-	-	2	1	1	-	-
C304	3	2	-	-	-	-	-	-	-	-	2	2	1	-	-

CS6504 COMPUTER GRAPHICS

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C305.1	Design two dimensional graphicsApply three dimensional transformations.	1,2,3,4,9,10,11,12	1,2,3
C305.2	Apply two dimensional transformations.	1,2,3,4,5,9,10,11,12	1,2,3
C305.3	Design three dimensional graphics.	1,2,3,4,5,9,10,11,12	1,2,3
C305.4	Apply Illumination and color models	1,2,3,4,5,9,10,11,12	1,2,3
C305.5	Apply clipping techniques to graphics	1,2,3,4,5,9,10,11,12	1,2,3
C305.6	Design animation sequence	1,2,3,4,5,9,10,11,12	1,2,3


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SEMESTER VI

CS6601 DISTRIBUTED SYSTEMS

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C309.1	Discuss trends in Distributed Systems.	1,2,3,4,9,10,11,12	1,2,3
C309.2	Apply network virtualization	1,2,3,4,5,9,10,11,12	1,2,3
C309.3	Apply remote method invocation and objects	1,2,3,4,5,9,10,11,12	1,2,3
C309.4	.Design process and resource management systems.	1,2,3,4,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C309.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C309.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C309.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C309.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C309	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

IT 6601 - MOBILE COMPUTING

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C310.1	Explain the basics of mobile telecommunication system.	1,2,3,4,9,10,11,12	-
C310.2	Choose the required functionality at each layer for given application.	,2,3,4,5,9,10,11,12	-
C310.3	Identify solution for each functionality at each layer.	,2,3,4,5,9,10,11,12	-
C310.4	Use simulator tools and design Ad hoc networks.	1,2,3,4,9,10,11,12	-
C310.5	Develop a mobile application.	,2,3,4,5,9,10,11,12	-

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C310.1	3	2	1	1	-	-	-	-	3	1	2	1	-	-	-
C310.2	3	2	1	1	1	-	-	-	1	2	2	1	-	-	-
C310.3	3	2	1	1	1	-	-	-	2	3	1	2	-	-	-
C310.4	3	2	1	1	-	-	-	-	1	2	1	2	-	-	-
C310.5	3	2	1	1	1	-	-	-	1	3	1	1	-	-	-
C310	3	2	1	1	1	-	-	-	2	3	2	2	-	-	-

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C307.3	Create dynamic web pages using server side scripting.	1,2,3,4,5,11,12	1,2,3
C307.4	Write Client Server applications.	1,2,3,4,5,11,12	1,2,3
C307.5	Use the frameworks JSP Strut, Hibernate, Spring	1,2,3,4,5,11,12	1,2,3
C307.6	Create applications with AJAX	1,2,3,4,5,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C307.1	3	2	1	1	1	-	-	-	-	-	2	1	1	3	3
C307.2	3	2	1	1	1	-	-	-	-	-	2	1	1	3	3
C307.3	3	2	1	1	1	-	-	-	-	-	1	2	1	2	2
C307.4	3	2	1	1	1	-	-	-	-	-	1	2	1	2	2
C307.5	3	2	1	1	1	-	-	-	-	-	1	1	1	1	1
C307.6	3	2	1	1	1	-	-	-	-	-	1	1	1	2	1
C307	3	2	1	1	1	-	-	-	-	-	2	2	1	2	2


CS6513 - COMPUTER GRAPHICS LABORTAORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C308.1	Create 3D graphical scenes using open graphics library suits	1,2,3	1
C308.2	Implement image manipulation and enhancement	1.2.3	1
C308.3	Create 2D animations using tools	1.2.3	1

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C308.1	3	2	1	-	-	-	-	-	-	-	-	-	1	-	-
C308.2	3	2	1	-	-	-	-	-	-	-	-	-	1	-	-
C308.3	3	2	1	-	-	-	-	-	-	-	-	-	1	-	-
C308	3	2	1	-	-	-	-	-	-	-	-	-	1	-	-


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C313.2	Identify appropriate AI methods to solve a given problem	1,2,3,4,9,10,11,12	1,2,3
C313.3	Formalise a given problem in the language/framework of different AI methods.	1,2,3,4,9,10,11,12	1,2,3
C313.4	Design and carry out an empirical evaluation of different algorithms on a problem	1,2,3,4,9,10,11,12	1,2,3
C313.5	Formalisation, and state the conclusions that the evaluation supports.	1,2,3,4,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C313.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C313.2	3	2	1	1	-	-	-	-	1	2	2	1	1	3	3
C313.3	3	2	1	1	--	-	-	-	2	3	1	2	1	2	2
C313.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C313.5	3	2	1	1	-	-	-	-	1	3	1	1	1	1	1
C3313	3	2	1	1	-	-	-	-	2	3	2	2	1	2	2

CS6611 MOBILE APPLICATION DEVELOPMENT LABORATORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C314.1	Design and Implement various mobile applications using emulators.	1,2,3,4,9,10,11,12	3
C314.2	Deploy applications to hand-held devices	1,2,3,4,9,10,11,12	3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C314.1	3	2	1	1	-	-	-	-	-	3	1	2	1	1	3
C314.2	3	2	1	1	-	-	-	-	-	1	2	2	1	1	3
C314	3	2	1	1	-	-	-	-	-	2	3	2	2	1	3

CS6612 COMPILER LABORATORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C315.1	Implement the different Phases of compiler using tools	1,2,3,4,9,10,11,12	1,2,3
C315.2	Analyze the control flow and data flow of a typical program	1,2,3,4,5,9,10,11,12	1,2,3
C315.3	Optimize a given program	1,2,3,4,5,9,10,11,12	1,2,3
C315.4	Generate an assembly language program equivalent to a source language program	1,2,3,4,9,10,11,12	1,2,3

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CS6660 COMPILER DESIGN

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C311.1	Design and implement a prototype compiler	1,2,3,4,9,10,11,12	1,2,3
C311.2	Apply the various optimization techniques.	1,2,3,4,5,9,10,11,12	1,2,3
C311.3	Use the different compiler construction tools.	1,2,3,4,5,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C311.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C311.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C311.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C311	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

IT6502 DIGITAL SIGNAL PROCESSING

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C312.1	Perform frequency transforms for the signals.	1,2,3,4,9,10,11,12	1,2,3
C312.2	Design IIR and FIR filters	1,2,3,4,5,9,10,11,12	1,2,3
C312.3	Finite word length effects in digital filters	1,2,3,4,5,9,10,11,12	1,2,3

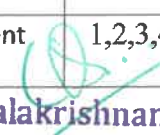
Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C312.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C312.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C312.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C312	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

CS6659 ARTIFICIAL INTELLIGENCE

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C313.1	Identify problems that are amenable to solution by AI methods. Implement basic AI algorithms.	1,2,3,4,9,10,11,12	1,2,3


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CS6702 GRAPH THEORY AND APPLICATIONS

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C402.1	Write precise and accurate mathematical definitions of objects in graph theory.	1,2,3,4,9,10,11,12	1,2,3
C402.2	Use mathematical definitions to identify and construct examples and to distinguish examples from non examples	1,2,3,4,5,9,10,11,12	1,2,3
C402.3	Validate and critically assess a mathematical proof	1,2,3,4,5,9,10,11,12	1,2,3
C402.4	Use a combination of theoretical knowledge and independent mathematical thinking in creative	1,2,3,4,9,10,11,12	1,2,3
C402.5	investigation of questions in graph theory. Reason from definitions to construct mathematical proofs	1,2,3,4,5,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C402.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C402.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C402.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C402.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C402.5	3	2	1	1	1	-	-	-	1	3	1	1	1	1	1
C402	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2


CS6703 GRID AND CLOUD COMPUTING

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C403.1	Apply grid computing techniques to solve large scale scientific problems.	1,2,3,4,9,10,11,12	2,3
C403.2	Apply the concept of virtualization	1,2,3,4,5,9,10,11,12	2,3
C403.3	Use the grid and cloud tool kits	1,2,3,4,5,9,10,11,12	2,3
C403.4	Apply the security models in the grid and the cloud environment	1,2,3,4,9,10,11,12	2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C403.1	3	2	1	1	-	-	-	-	3	1	2	1	-	3	3
C403.2	3	2	1	1	1	-	-	-	1	2	2	1	-	3	3
C403.3	3	2	1	1	1	-	-	-	2	3	1	2	-	2	2
C403.4	3	2	1	1	-	-	-	-	1	2	1	2	-	2	2
C403	3	2	1	1	1	-	-	-	1	3	1	1	-	1	1


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Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C315.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C315.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C315.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C315.4	3	2	1	1	-	-	-	-	1	2	1	2	1	2	2
C315	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

GE6674 COMMUNICATION AND SOFT SKILLS- LABORATORY BASED

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C316.1	Take international examination such as IELTS and TOEFL	1,2,3,4,10,11,12	1
C316.2	Make presentations and Participate in Group Discussions	1,2,3,4,10,11,12	1
C316.3	Successfully answer questions in interviews	1,2,3,4,10,11,12	1

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C316.1	3	2	1	1	-	-	-	-	-	1	2	1	1	-	-
C316.2	3	2	1	1	1	-	-	-	-	2	2	1	1	-	-
C316.3	3	2	1	1	1	-	-	-	-	3	1	2	1	-	-
C316	3	2	1	1	1	-	-	-	-	3	2	2	1	-	-

SEMESTER VII

CS6701 CRYPTOGRAPHY AND NETWORK SECURITY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C401.1	Compare various Cryptographic Techniques	1,2,3,4,9,10,11,12	1,2,3
C401.2	Design Secure applications	1,2,3,4,5,9,10,11,12	1,2,3
C401.3	Inject secure coding in the developed applications	1,2,3,4,5,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C401.1	3	2	1	1	-	-	-	-	3	1	2	1	1	3	3
C401.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C401.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C401	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2

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CS6712 GRID AND CLOUD COMPUTING LABORATORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C406.1	Use the grid and cloud tool kits	1,2,3,4,10,11,12	1,2,3
C406.2	Design and implement applications on the Grid.	1,2,3,4,10,11,12	1,2,3
C406.3	Design and Implement applications on the Cloud.	1,2,3,4,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C406.1	3	2	1	1	-	-	-	-	-	1	2	1	1	3	3
C406.2	3	2	1	1	-	-	-	-	-	2	2	1	1	3	3
C406.3	3	2	1	1	-	-	-	-	-	3	1	2	1	2	2
C406	3	2	1	1	-	-	-	-	-	3	2	2	1	2	2


CS6801 MULTI-CORE ARCHITECTURES AND PROGRAMMING

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C407.1	Program Parallel Processors.	1,2,3,4,5,9,10,11,12	1,3
C407.2	. Develop programs using OpenMP and MPI.	1,2,3,4,5,9,10,11,12	1,3
C407.3	Compare and contrast programming for serial processors and programming for parallel processors.	1,2,3,4,5,9,10,11,12	1,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C407.1	3	2	1	1	1	-	-	-	3	1	2	1	1	-	3
C407.2	3	2	1	1	1	-	-	-	1	2	2	1	1	-	3
C407.3	3	2	1	1	1	-	-	-	2	3	1	2	1	-	2
C407	3	2	1	1	1	-	-	-	2	3	2	2	1	-	2


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CS6704 RESOURCE MANAGEMENT TECHNIQUES

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C404.1	Solve optimization problems using simplex method	1,2,3,4,10,11,12	1,2
C404.2	Apply integer programming and linear programming to solve real-life applications.	1,2,3,4,10,11,12	1,2
C404.3	Use PERT and CPM for problems in project management	1,2,3,4,10,11,12	1,2

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C404.1	3	2	1	1	-	-	-	-	-	1	2	1	1	3	3
C404.2	3	2	1	1	-	-	-	-	-	2	2	1	1	3	3
C404.3	3	2	1	1	-	-	-	-	-	3	1	2	1	2	2
C404	3	2	1	1		-	-	-		3	2	2	1	2	2

CS6711 SECURITY LABORATORY

After the course, the student should be able to:

CO	Course Outcomes	POs	PSOs
C405.1	Explain the architecture of embedded processors.	1,2,3,4,5,9,10,11,12	1,2,3
C405.2	Write embedded C programs.	1,2,3,4,5,9,10,11,12	1,2,3
C405.3	Design simple embedded applications	1,2,3,4,5,9,10,11,12	1,2,3

Mapping of COs, C, PSOs with POs

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C405.1	3	2	1	1	1	-	-	-	3	1	2	1	1	3	3
C405.2	3	2	1	1	1	-	-	-	1	2	2	1	1	3	3
C405.3	3	2	1	1	1	-	-	-	2	3	1	2	1	2	2
C405	3	2	1	1	1	-	-	-	2	3	2	2	1	2	2


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