BVRIT HYDERABAD College of Engineering for Women

Department of Computer Science and Engineering

Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date:16.04.2019

Regulation : R18
Academic Year & Sem : 2019-20, I Sem
JNTUH Course Code : CS302ES
Course Name : Data Structures
Branch : CSE
Course Coordinators : Ms G Shanti & Ms B Nagaveni

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C212.1	Implement various operations on linear data structures to solve real world problems.	Apply
C212.2	Design solutions using Dictionaries and Hash Tables.	Create
C212.3	Implement various kinds of trees and their operations.	Apply
C212.4	Represent graphs and traverse them.	Apply
C212.5	Choose appropriate sorting algorithm.	Analyze
C212.6	Examine Pattern matching algorithms and Tries.	Analyze

Regulation : R18
Academic Year & Sem : 2019-20, I Sem
JNTUH Course Code : CS304PC
Course Name : Computer Organization and Architecture
Branch : CSE
Course Coordinators : Mr R S Murali Nath & Ms P Kavitha

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C214.1	Implement Micro-operations in Design, Organization and Architecture of a basic computer.	Apply
C214.2	Design a suitable Control unit for a decided set of Instructions.	Create
C214.3	Design Hardware and Algorithms for manipulation of data, represented in different formats.	Create
C214.4	Implement data transfer with appropriate IO Interface and Interrupt mechanism.	Apply
C214.5	Choose suitable type of Memory for given purpose	Analyze
C214.6	Perform Parallel Processing using suitable mechanism	Apply

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date:20.04.2019

Regulation : **R18**
Academic Year & Sem : **2019-20, I Sem**
JNTUH Course Code : **CS305PC**
Course Name : **Object Oriented Programming using C++**
Branch : **CSE**
Course Coordinators : **Mr.M.Bapiraju & Mr K Naresh**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C215.1	Make use of object oriented paradigm with concepts of classes and objects.	Apply
C215.2	Design and Implement programs using C++	Create
C215.3	Apply concepts of Inheritance in real time problems.	Apply
C215.4	Design solutions for real time problems using Polymorphism and Abstract classes.	Create
C215.5	Apply features of stream I/O, various file handling techniques in C++	Apply
C215.6	Analyze the concept Exception handling using C++	Analyze

Regulation : **R18**
Academic Year & Sem : **2019-20, I Sem**
JNTUH Course Code : **CS307PC**
Course Name : **Data Structures Lab**
Branch : **CSE**
Course Coordinators : **Ms G Shanti & Ms B Nagaveni**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C217.1	Experiment with various kinds of linked lists and their operations.	Apply
C217.2	Design programs to implement stacks & queue ADT.	Apply
C217.3	Develop programs for searching and sorting algorithms.	Apply
C217.4	Implement trees and graph traversals.	Apply

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Date:20.04.2019

Regulation : R18
Academic Year & Sem : 2019-20, I Sem
JNTUH Course Code : CS308PC
Course Name : IT Workshop Lab
Branch : CSE
Course Coordinators : Ms .E G Padmavati & Ms.G.Nagamani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C218.1	Construct a Personal Computer and prepare the computer ready to use.	Analyze
C218.2	Prepare the Documents & slide presentations using Word processors and presentation tools.	Apply
C218.3	Apply internet concepts to connect two or more computers for information sharing.	Analyze
C218.4	Build a dual mode operating system PC by installing OS Software.	Apply

Regulation : R18
Academic Year & Sem : 2019-20, I Sem
JNTUH Course Code : CS309PC
Course Name : C++ Programming Lab
Branch : CSE
Course Coordinators : Mr.M.Bapiraju & Mr K Naresh

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C219.1	Apply Object oriented features and C++ concepts.	Apply
C219.2	Apply the concept of polymorphism and inheritance.	Apply
C219.3	Implement exception handling and templates.	Evaluate
C219.4	Develop applications using Console I/O and File I/O.	Create

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date: 19.11.2019

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS401PC
Course Name : Discrete Mathematics
Branch : CSE
Course Coordinators : Mr.R.S.Murali Nath & Ms B Nagaveni

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C221.1	Read, comprehend, and construct mathematical arguments for proofs.	Apply
C221.2	Work and Apply discrete structures	Apply
C221.3	Validate the algorithms using Induction techniques.	Analyze
C221.4	Apply probabilistic concepts in randomness	Apply
C221.5	Perform combinatorial analysis to solve counting problems and analyze algorithms.	Analyze
C221.6	Model real-world problems using graphs and trees.	Create

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : SM405MS
Course Name : Business Economics and Financial Analysis
Branch : CSE
Course Coordinators : Dr.T.Roja Rani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C222.1	Understand the Economic Concepts in the business decision making process.	Apply
C222.2	Familiarize with the cost concepts, market structures.	Evaluate
C222.3	Make use of breakeven analysis, CVP Analysis, pricing strategies.	Apply
C222.4	Examine financial accounting and analyze various financial statements.	Apply
C222.5	Interpret various financial statements by applying different types of ratios.	Apply
C222.6	Examine the usefulness of funds flow statements and cash flow statements for better managerial decisions.	Analyze

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Date: 21.11.2019

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS403PC
Course Name : Operating Systems
Branch : CSE
Course Coordinators : Mr C Nagaraju & Ms.G.Nagamani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C223.1	Analyze the functionalities and structure of a generic Operating System.	Analyze
C223.2	Evaluate various CPU scheduling algorithms.	Evaluate
C223.3	Analyze process synchronization and IPC mechanisms.	Analyze
C223.4	Assess the techniques of deadlock avoidance and prevention.	Evaluate
C223.5	Examine different Memory management techniques.	Evaluate
C223.6	Explore file system interface and its operations.	Analyze

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS404PC
Course Name : Database Management Systems
Branch : CSE
Course Coordinators : Mr.K.Naresh & Ms C Jagadeeswari

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C224.1	Identify and classify the components of Database system	Analyze
C224.2	Model the data using ER model and convert into Relational Model.	Create
C224.3	Access and manipulate the data in the databases.	Evaluate
C224.4	Refine the database schema to improve data consistency.	Create
C224.5	Ensure the properties of transactions on Databases.	Evaluate
C224.6	Examine different file organizations and indexing methods.	Analyze

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date: 23.11.2019

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS405PC
Course Name : Java Programming
Branch : CSE
Course Coordinators : Ms B Sneha & Mr.M.Bapiraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C225.1	Illustrate Object Oriented concepts and basics of java programming	Apply
C225.2	Make use of the concepts of packages and Interfaces.	Apply
C225.3	Implement the concepts of multithreading and /or handle run time errors for Java applications.	Apply
C225.4	Utilize collection framework and /or file management in Java applications.	Apply
C225.5	Design real time applications using event handling concepts.	Create
C225.6	Develop real time GUI applications using applet, AWT, JDBC and swings.	Create

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS406PC
Course Name : Operating Systems Lab
Branch : CSE
Course Coordinators : Mr C Nagaraju & Ms.G.Nagamani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C226.1	Evaluate CPU Scheduling Algorithms and Memory management techniques.	Evaluate
C226.2	Construct deadlock detection and avoidance algorithms.	Create
C226.3	Solve classical problems of synchronization using semaphores.	Evaluate
C226.4	Evaluate inter process communication mechanisms using system calls and pipes.	Evaluate

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Date: 22.11.2019

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS407PC
Course Name : Database Management Systems Lab
Branch : CSE
Course Coordinators : Mr.K.Naresh & Ms C Jagadeeswari

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C227.1	Design conceptual model (E-R model) for the given database.	Create
C227.2	Formulate the queries using DML, DDL, DCL commands.	Create
C227.3	Enforce integrity constraints on databases.	Analyze
C227.4	Implement triggers, stored procedures and cursors.	Apply

Regulation : R18
Academic Year & Sem : 2019-20, II Sem
JNTUH Course Code : CS405PC
Course Name : Java Programming Lab
Branch : CSE
Course Coordinators : Ms B Sneha & Mr.M.Bapiraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C228.1	Make use of JDK, Eclipse platform for developing java programs.	Apply
C228.2	Build programs using abstract classes and multithreading concepts.	Apply
C228.3	Develop programs using GUI components.	Create
C228.4	Develop Programs using Quick Sort and Bubble Sort.	Create

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Date:20-07-2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS501PC
Course Name : Formal Languages and Automata Theory
Branch : CSE
Course Coordinators : Ms B.Nagaveni, Mr K.Rajesh

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C311.1	Design FA machines, minimization, achieve conversions among them.	Create
C311.2	Construct Regular expressions and Test for regular languages	Apply
C311.3	Analyze LMD,RMD derivations and convert grammar to finite automata and vice versa	Analyze
C311.4	Design Pushdown Automata and normal forms for context free grammars.	Create
C311.5	Design appropriate Turing Machine for a given problem	Create
C311.6	Distinguish P ,NP problems and PCP problems	Analyze

Regulation : R18
Academic Year & Sem : 2020-2021, Sem-I
JNTUH Course Code : CS502PC
Course Name : Software Engineering
Branch : CSE
Course Coordinators : Dr Ch Srinivasulu,Ms. Naga Kalyani.A

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C312.1	Illustrate process framework and models for the development based on the nature of the software.	Apply
C312.2	Analyze the requirements to select a model and for preparation of an SRS document.	Analyze
C312.3	Choose an appropriate model to create architecture by using design principles.	Create
C312.4	Apply various testing strategies to validate the software quality.	Apply
C312.5	Illustrate the importance of product metrics in software development.	Apply
C312.6	Develop reliable software by managing risk and following Quality Standards.	Create

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Date: 22-07-2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS503PC
Course Name : Computer Networks
Branch : CSE
Course Coordinators : Dr. N.Sreekanth & Ms D Swapna

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C313.1	Examine the components and reference models of networks with suitable examples.	Analyze
C313.2	Apply the feasible standards of transmission media for a given network.	Apply
C313.3	Analyze counter measures like error detection, correction, flow control and medium access protocols in the data link layer.	Analyze
C313.4	Identify the suitable algorithms for routing in the network layer.	Apply
C313.5	Assess the connection management and congestion control of TCP and UDP protocols.	Evaluate
C313.6	Analyze the services of various user interface protocols.	Analyze

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS504PC
Course Name : Web Technologies
Branch : CSE
Course Coordinators : Mr.K.Naresh & Mr M Bapiraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C314.1	Design dynamic web based applications using PHP	Create
C314.2	Design static web applications using HTML	Create
C314.3	Analyze XML tags and parsing of XML data in Java	Analyze
C314.4	Develop server side programming using servlet and connect to the database using JDBC	Create
C314.5	Develop server side programming using JSP and connect to the database using JDBC	Create
C314.6	Validate the web application at the client side using javascript	Apply

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Date:18.07.2020

Regulation : R18
Academic Year & Sem :2020-21,Sem-I
JNTUH Course Code : CS511PE
Course Name : Information Theory & coding
Branch : CSE
Course Coordinators : Ms G Nagamani , Ms P Samyuktha

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C315.1	Calculate information, entropy, mutual information and channel capacity for various channels	Apply
C315.2	Compare various source coding techniques in terms of their efficiency	Analyze
C315.3	Inspect error detection and correction in linear block codes	Analyze
C315.4	To design encoder and decoder of various codes	Create
C315.5	Analyze the applicability of source and channel codes	Analyze
C315.6	Discover Minimum distance and BCH bounds and procedure of decoding BCH codes	Analyze

Regulation : R18
Academic Year & Sem : 2020-21 & Sem-I
JNTUH Course Code : CS512PE
Course Name : Advanced Computer Architecture
Branch : CSE & IT
Course Coordinators : Ms.E G Padmavati , Ms A Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C316.1	Identify different computational models and Computer Architectures.	Apply
C316.2	Analyze operation of parallel processing and memory hierarchy and the range of performance issues influencing its design.	Analyze
C316.3	Classify the performance of different pipelined &non- pipelined processors.	Analyze
C316.4	Analyze architectural features of advanced processors like Superscalar processors, multiprocessors.	Analyze
C316.5	Analyze multiprocessors & thread level parallelism using shared, distributed memory models.	Analyze
C316.6	Develop the design techniques of Scalable and multithreaded Architecture.	Create

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Date: 25-07-2020

Regulation : R18
Academic Year & Sem : 2020-2021,Sem-I
JNTUH Course Code : CS513PE
Course Name : Data Analytics
Branch : CSE
Course Coordinators : Dr.G.Naga Satish, Ms.C.Jagadeeswari

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C317.1	Fetch data from various sources and make it ready for analysis	Apply
C317.2	Make use of various tools and technologies for data analysis	Apply
C317.3	Apply regression techniques to data and evaluate performance	Analyze
C317.4	build supervised and unsupervised learning models for object segmentation	Create
C317.5	Build models for time series and evaluate performance	Create
C317.6	Visualize the data and interpret the insights exist in data	Analyze

Regulation : R18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code : CS514PE
Course Name : Image Processing
Branch : Computer Science and Engineering
Course Coordinators : Mr Shivamurthy Hiremath Ms Suparna Das

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C318.1	Demonstrate the Knowledge of the basic concepts of the two dimensional signal acquisition, sampling and quantization	Understand
C318.2	Demonstrate the knowledge of filtering techniques.	Apply
C318.3	Demonstration of knowledge of 2D transformation techniques.	Evaluate
C318.4	Demonstrate the knowledge of image enhancement, segmentation, restoration and compression techniques	Create
C318.5	Be able to do on Image processing algorithms using MATLAB Software	Analyze
C318.6	Professional Contribution to Digital Image Processing	Evaluate

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Date: 25.07.2020

Regulation : R18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code : CS515PE
Course Name : PRINCIPLES OF PROGRAMMING LANGUAGES
Branch : CSE
Course Coordinators : Mr. Naresh K, Mr. K Bhargav Ram

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C319.1	Identify the building blocks of various Programming languages	Analyze
C319.2	Implement various methods to describe syntax and semantics of programming languages	Apply
C319.3	Examine fundamentals like Data types, Control Structures etc. of various programming languages	Analyze
C319.4	Make use of Subprograms and ADT in implementing business logic	Apply
C319.5	Apply the techniques to handle Concurrency, Exceptions and Events in programming	Apply
C319.6	Outline Functional, Logic and Scripting Programming Language Concept	Analyze

Regulation : R18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code : CS521PE
Course Name : Computer Graphics
Branch : CSE
Course Coordinators : Ms. P.Kavitha , Ms.B.Nagaveni

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO No.	Course Outcomes	Blooms Level
C31A.1	Analyze the functionality of various Input ,output devices	Analyze
C31A.2	Design algorithms for primitive components and to fill 2-D shapes	Create
C31A.3	Perform transformations and create views for 2-D co-ordinates	Evaluate
C31A.4	Perform transformations and create views for 3-D co-ordinates	Evaluate
C31A.5	Apply surface detection methods	Apply
C31A.6	Gain experience in constructing interactive computer animations	Create

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Date: 25.07.2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS522PE
Course Name : Advanced Operating Systems
Branch : CSE & IT
Course Coordinators : Ms D Swapna , Ms G Nagamani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31B.1	Draw inference on the various design approaches of advanced operating systems	Analyze
C31B.2	Analyze the design issues of distributed operating systems.	Apply
C31B.3	Identify the advantages and challenges in designing distributed algorithms for different primitives like mutual exclusion, deadlock detection, agreement, etc.	Analyze
C31B.4	Examine design issues and computational performance of multi-processor operating systems.	Analyze
C31B.5	Identify the requirements of Distributed File System and Distributed Shared Memory.	Apply
C31B.6	Analyze how computing power is created and synchronized in Distributed systems	Analyze

Regulation : R18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code : CS523PE
Course Name : Information Retrieval Systems
Branch : CSE
Course Coordinators : Dr.G.Naga Satish , Ms G Shanti

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31C.1	Implementation of Information Retrieval system capabilities and Digital Libraries	Evaluate
C31C.2	Implement the Indexing and the Data Structures	Apply
C31C .3	Compute the Automatic indexing, Document and term clustering.	Analyze
C31C .4	Apply user search techniques to improve the information visualization.	Apply
C31C .5	Implementation of Text Search Algorithms.	Apply
C31C .6	Build the working model for multimedia information retrieval system.	Create

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Date: 23-07-2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS524PE
Course Name : Distributed Databases
Branch : CSE
Course Coordinators : Mr C Nagaraju , Dr N Sreekanth

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C31D.1	Analyze the architecture and design of distributed database systems.	Analyze
C31D.2	Explore the objectives and algorithms for distributed query processing.	Analyze
C31D.3	Examine the mechanisms of concurrency control and deadlock management.	Analyze
C31D.4	Evaluate the measures of distributed systems reliability and fault tolerance.	Evaluate
C31D.5	Illustrate the importance of parallel database systems.	Analyze
C31D.6	Examine the concepts of object oriented database management systems.	Analyze

Regulation : R18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code : CS525PE
Course Name : Natural Language Processing
Branch : Computer Science and Engineering
Course Coordinators : Mr Shivamurthy Hiremath,Mr U Chandra Sekhar

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C31E.1	Show sensitivity to linguistic phenomena and an ability to model them with formal grammars	Understand
C31E.2	Understand and carry out proper experimental methodology for training and evaluating empirical NLP systems	Apply
C31E.3	Able to manipulate probabilities, construct statistical models over strings and trees, and estimate parameters using supervised and unsupervised training methods.	Evaluate
C31E.4	Able to design, implement, and analyze NLP algorithms	Create
C31E.5	Able to design different language Modeling Techniques.	Evaluate
C31E.6	Able to design Applications of Natural Language Processing	Create

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Date: 25-07-2020

Regulation : R18
Academic Year & Sem : 2020- 21,Sem-I
JNTUH Course Code : CS505PC
Course Name : Software Engineering Lab
Branch : CSE
Course Coordinators : Dr.Ch.Srinivasulu, Ms A Naga Kalyani.

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31F.1	Analyze the problem and identify project scope and objectives and analyze the software requirements and prepare SRS document.	Analyze
C31F.2	Develop risk strategy and QA techniques for developing quality software	Apply
C31F.3	Design the software using UML diagrams	Create
C31F.4	Design the test case document	Create

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS506PC
Course Name : Computer Networks and Web Technologies Lab
Branch : CSE
Course Coordinators : Ms D Swapna & Mr M Bapiraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31G.1	Implement various algorithms of data link, network, transport and presentation layer.	Analyze
C31G.2	Evaluate data transmission techniques and monitor the network traffic using appropriate simulation tools.	Evaluate
C31G.3	Develop web applications using Client Side Technologies HTML, CSS, Javascript and XML	Create
C31G.4	Develop web applications using Server Side Technologies PHP, Servlet and JSP	Create

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Date: 25-07-2020

Regulation : R18
Academic Year & Sem : 2020 -21 ,Sem-I
JNTUH Course Code : EN508HS
CourseName : Advanced Communication Skills Lab
Branch : CSE
Course Coordinators : Mr.Kasturi Sydaiah

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31H.1	Build sound vocabulary and use functional English effectively	Apply
C31H.2	Analyze the given text and respond appropriately and develop efficacious writing skills	Analyze
C31H.3	Develop effective speaking skills and maximize job prospects	Create
C31H.4	Plan and make different forms of presentation using various techniques	Create

Regulation : R18
Academic Year & Sem : 2020 -21 ,Sem-I
JNTUH Course Code : MC510
Course Name : INTELLECTUAL PROPERTY RIGHTS
Branch : CSE
Course Coordinators : Dr. S. Kalyan

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31I.1	Discuss the fundamental aspects of Intellectual property Rights which play a major role in development and management of innovative projects in industries.	Understand
C31I.2	Examine Trademarks, Acquisition of Trade Mark Rights and its registration processes.	Analyze
C31I.3	Evaluate various aspects relating to copyrights and its procedure for registration processes.	Evaluate
C31I.4	Evaluate with the Trade Secret Law, protection for submission, Unfair Competition	Evaluate
C31I.5	Evaluate on the International Developments in Intellectual Property Rights	Evaluate
C31I.6	Interpret about current trends in IPR and the steps taken by the Government of India in fostering IPR	Apply

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 25-07-2020

Regulation : R 18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code : EC511PE
Course Name : Computer Architecture and Operating System
Branch : ECE
Course Coordinators : Ms Suparna Das , Ms A Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C31J .1	Understand the Basic structure of a digital computer.	Understand
C31J .2	Develop the structure of digital computer Arithmetic operations of binary number system	Create
C31J .3	Classify the organization of the Control Unit, Arithmetic and Logical Unit, Memory Unit and the I/O unit.	Analyze
C31J .4	Understand the Operating system functions, types, system calls.	Understand
C31J .5	Understand the memory management techniques impact of set architecture of computer design.	Understand
C31J .6	Examine Operating system file system and implementation and its interface instruction	Analyze

Regulation : R18
Academic Year & Sem : 2020-2021 & Sem-I
JNTUH Course Code : EC502PC
Course Name : Data Communications and Networks
Branch : ECE
Course Coordinators : Dr. N Sreekanth, Mr. C. Nagaraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31K.1	Analyze the Categories and functions of various Data communication Networks	Analyze
C31K.2	Design and analyze various error detection techniques.	Evaluate
C31K.3	Demonstrate the mechanism of routing the data in network layer	Evaluate
C31K.4	Analyze the significance of various Flow control and Congestion control Mechanisms	Analyze
C31K.5	Analyze the Functioning of various Application layer Protocols.	Analyze
C31K.6	Analyze the features and operations of various user interface protocols.	Analyze

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date:22.07.2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : EC506PC
Course Name : Data Communication and Networks Lab
Branch : ECE
Course Coordinators : Dr N Sreekanth, Mr C Nagaraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C31L.1	Create and evaluate the performance of various LAN topologies	Create
C31L.2	Evaluate the performance of queue management, scheduling mechanisms and protocols	Evaluate
C31L.3	Evaluate the performance of routing protocols and IEEE 802.x standards.	Evaluate
C31L.4	Analyze various protocols using packet capture monitoring tools.	Analyze

Regulation : R18
Academic Year & Sem : 2020-21,Sem-I
JNTUH Course Code :
Course Name : Artificial Intelligence
Branch : CSE
Course Coordinators : Mr U Chandra Sekhar,Ms A Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C31J .1	Inference the ability to formulate an efficient problem space for a problem expressed.	Analyze
C31J .2	Experiment with the ability to select a search algorithm for a problem and characterize its time and space complexities.	Apply
C31J .3	Assess the skill for representing knowledge using the appropriate technique.	Evaluate
C31J .4	Prioritize the ability to apply AI techniques to solve problems of game playing.	Evaluate
C31J .5	Formulate the AI techniques for implementing machine learning paradigm.	Create
C31J .6	Composition of knowledge representation technique to solve using different types of techniques.	Create

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 24-07-2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-II
JNTUH Course Code : CS601PC
Course Name : Machine Learning
Branch : Computer Science and Engineering
Course Coordinators : Ms Naga kalyani, Ms.A.Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C321.1	Formulate the problems of searching that converge to correct hypotheses using concept and decision tree learning.	Create
C 321.2	Interpret face recognition, learning robot control with ANN	Apply
C321.3	Apply Bayesian classification, Naïve Bayes theorem to analyze several learning algorithms.	Apply
C321.4	Evaluate the accuracy of learned hypothesis with statistical methods and analyze the operations of algorithm	Evaluate
C321.5	Apply genetic, sequential algorithms to perform simulated evaluation of learning and optimization problems	Apply
C321.6	Formulate the general hypothesis with inductive and analytical learning.	Create

Regulation : R18
Academic Year & Sem :2020-21 ,Sem-II
JNTUH Course Code :CS602PC
Course Name :COMPILER DESIGN
Branch : CSE
Course Coordinators :Mr.K.Rajesh, MsB.Nagaveni

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C322.1	Identify the phases in design of a compiler	Apply
C322.2	Apply practical aspects of automata theory	Apply
C322.3	Distinguish between top-down parsers and bottom-up parsers.	Analyze
C322.4	Construct Intermediate Code based on Abstract Tree and Symbol table data.	Apply
C322.5	Decide among the code optimization techniques to use.	Evaluate
C322.6	Build powerful code generating compilers.	Create

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 21-07-2020

Regulation : R18
Academic Year & Sem : 2020-21 ,Sem-II
JNTUH Course Code : CS603PC
Course Name : Design and Analysis of Algorithms
Branch : CSE
Course Coordinators : Prof R S Murali Nath, Mr M D Sugnana Rao

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C323.1	Analyze the performance of algorithms and represent using relevant notations.	Analyze
C323.2	Model real world applications using sets graphs and trees.	Apply
C323.3	Explore basic techniques for designing algorithm using divide – conquer & Greedy approach to various problems.	Apply
C323.4	Identify suitable design paradigms to improve the solution space using Dynamic Programming & Backtracking method.	Analyze
C323.5	Reduce the search space of a problem using bounding functions.	Analyze
C323.6	Categorize problems into NP hard & NP Complete.	Analyze

Regulation : R18
Academic Year & Sem : 2020-21 ,Sem-II
JNTUH Course Code : CS611PE
Course Name : Concurrent Programming
Branch : CSE
Course Coordinators : Dr.L.Lakshmi & Ms. P.Samyuktha

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C324.1	Understand the use of shared objects for communication and co-ordination among concurrent processes.	Apply
C324.2	Apply mutual exclusion and condition synchronization in multithreaded processes.	Apply
C324.3	Design concurrent programs using blocking and non-blocking concurrent objects	Create
C324.4	Solve synchronization problems by identifying a set of primitive synchronization operations.	Evaluate
C324.5	Implement multithreading using various synchronization mechanisms.	Evaluate
C324.6	Implement concurrent queues and stacks to achieve a high degree of parallelism.	Apply

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 23-07-2020

Regulation : R18
Academic Year &Sem : 2020-21, Sem-II
JNTUH Course Code : CS612PE
Course Name : Network Programming
Branch : CSE
Course Coordinators : Mr. Chandrasekhar U , Ms. Nagamani G

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C325.1	Examine major protocols used for inter process communication	Analyze
C325.2	Analyzing Client server communication, Elementary UDP Sockets programming, I/o multiplexing	Analyze
C325.3	Apply the concepts related to Interprocess communication using sockets.	Apply
C325.4	Explain network services that communicate through Internet	Evaluate
C325.5	Access various kinds of Broadcasting and Multicasting mechanisms.	Evaluate
C325.6	Design robust socket-based applications	Create

Regulation : R18
Academic Year & Sem : 2020-21, Sem-II
JNTUH Course Code : CS613PE
Course Name : Scripting Languages
Branch : CSE
Course Coordinators : Mr K.Bhargav Ram & Mr M Bapiraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C326.1	Make use of resources to gain some fluency programming in Ruby, Perl, TCL and TK	Apply
C326.2	Analyze the features of Ruby by embedding in different ways	Analyze
C326.3	Understanding the Perl by utilizing the advanced features	Understand
C326.4	Explain syntax, variables and various features of TCL	Evaluate
C326.5	Elaborate strengths and weakness TCL and select an appropriate language for solving a given problem	Create
C326.6	Examine the TK by embedding in different ways	Analyze

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 23-07-2020

Regulation : R18
Academic Year & Sem : 2020-21,Sem-II
JNTUH Course Code : CS614PE
Course Name : MOBILE APPLICATION DEVELOPMENT
Branch : CSE & IT
Course Coordinators : Mr. Naresh K, Ms. Suparna Das

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C327.1	Analyze the features, components and life cycle of Android Operating system	Analyze
C327.2	Design Android application with UI components, Fragments and event handling	Create
C327.3	Identify the importance of intents in Android applications development	Apply
C327.4	Develop Android applications using broadcasts and notifications	Create
C327.5	Examine the data persistence mechanism using Files and Shared Preferences	Analyze
C327.6	Develop Android application to perform operations with SQLite database	Create

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Regulation : R18
Academic Year & Sem : 2020 -21,SEM-II
JNTUH Course Code : CS615PE
CourseName : Software Testing Methodologies
Branch : CSE
Course Coordinators : Ms C. Jagadeeswari, Ms E G Padmavati.

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C328.1	Analyze the basic concepts of software testing and its essentials and investigate the reason for bugs and analyze the principles in software testing to prevent and remove bugs.	Analyze
C328.2	Apply functional testing using control flow and transaction flow graphs.	Apply
C328.3	Test for a domain or an application and identifying the nice and ugly domains.	Analyze
C328.4	Choose appropriate path expression, KV charts, specifications and more testing strategies.	Create
C328.5	Design and implement state graph, state testing, good state graph, bad state graph and their testability tips.	Create
C328.6	Explain graph matrices, matrix properties and node reduction algorithm.	Evaluate

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Date:20-07-2020

Regulation : R18
Academic Year & Sem : 2020-21, Sem-II
JNTUH Course Code : EC600OE
Course Name : Fundamentals of Internet of Things
Branch : CSE
Course Coordinators : Ms A.Naga Kalyani, Ms A Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C329.1	Inference the impact and challenges posed by IoT networks leading to new architectural models.	Analyze
C329.2	Compare and contrast the deployment of smart objects and the technologies to connect them to the network.	Apply
C329.3	Appraise the role of IoT protocols for efficient network communication.	Analyze
C329.4	Elaborate python programming with various interfacing devices using Raspberry PI.	Apply
C329.5	Construct a IoT application using Raspberry Pi, to handle data and perform analytics.	Analyze
C329.6	Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry	Create

Regulation : R18
Academic Year & Sem : 2020 -21 & III Year –II SEM
JNTUH Course Code : CS604PC
Course Name : Machine Learning LAB
Branch : Computer Science and Engineering
Course Coordinators : Ms Naga kalyani, Ms.A.Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32A.1	Compare Machine Learning algorithms based on their advantages and limitations and use the best one according to situation	Analyze
C32A.2	Interpret and understand modern notions in data analysis-oriented computing	Evaluate
C32A.3	Apply common Machine Learning algorithms in practice and implement by their own confidently.	Apply
C32A.4	Experiment with real-world data using Machine Learning algorithms.	Apply

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 18-07-2020

Regulation : R18
Academic Year & Sem :2020-21,Sem-II
JNTUH Course Code :CS605PC
Course Name :COMPILER DESIGN LAB
Branch : CSE
Course Coordinators :MrK.Rajesh & MsB.Nagaveni

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32B.1	Identify the practical approach of how a compiler works	Apply
C32B.2	Construct top down and bottom up parse tools	Apply
C32B.3	Construct LEX and YACC programs	Apply
C32B.4	Develop new computer languages	Create

Regulation : R18
Academic Year & Sem : 2020-21,Sem-II
JNTUH Course Code : CS621PE
Course Name : Concurrent Programming Lab
Branch : CSE
Course Coordinators : Dr.L.Lakshmi & Ms. P.Samyuktha

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32C.1	Implement mutual exclusion, dead lock free and starvation free multi thread programming.	Evaluate
C32C.2	Create concurrent FIFO queue data structure using multi thread programming	Create
C32C.3	Design a consensus object by implementing mutual exclusion lock using CompareAndSet( ) Primitive	Create
C32C.4	Apply multithread programming to implement List, stack and queue using atomic primitives	Apply

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 22-07-2020

Regulation : R18
Academic Year &Sem : 2020-21, Sem-II
JNTUH Course Code : CS622PE
Course Name : Network Programming Lab
Branch : CSE
Course Coordinators : Mr. Chandrasekhar U, Ms. Nagamani G

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32D.1	Develop inter process communication using pipes, message queue & shared memory	Create
C32D.2	Design and implement client-server applications using TCP and UDP sockets	Create
C32D.3	Implement peer to peer communication	Create
C32D.4	Analyze Network programs	Analyze

Regulation : R18
Academic Year & Sem : III- II Sem
JNTUH Course Code : CS623PE
Course Name : Scripting Languages Lab
Branch : CSE
Course Coordinators : Mr K.Bhargav Ram & Mr M Bapiraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32E.1	Design and test programs to solve mathematical problems	Create
C32E.2	Develop programs Using Ruby Script	Create
C32E.3	Develop Programs Using TCL Script	Create
C32E.4	Develop Programs Using Perl Script	Create

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 21-07-2020

Regulation : **R18**
Academic Year & Sem : **2020-21**
JNTUH Course Code : **CS624PE**
Course Name : **MOBILE APPLICATION DEVELOPMENT LAB**
Branch : **CSE & IT**
Course Coordinators : **Mr. Naresh K, Ms.Suparna Das**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32F.1	Design Android User Interface using Layouts and components	Apply
C32F.2	Design android applications using menus, notifications and files	Create
C32F.3	Develop Android application to persist data in Files, Shared Preferences and SQLite databases	Create
C32F.4	Develop Android application based on Alarm and URL	Create

Regulation : **R18**
Academic Year & Sem : **2020 -21 & III Year- II SEM**
JNTUH Course Code : **CS625PE**
Course Name : **Software Testing Methodologies Lab**
Branch : **CSE**
Course Coordinator : **Ms. C.Jagadeeswari & Ms. Padmavati E G**

With reference to the guidelines provided by DAC and mapping COs with the relevant Pos following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32G.1	Examine selenium tool to perform functional testing	Analyze
C32G.2	Demonstrate how to execute test scripts using selenium	Analyze
C32G.3	Apply advanced features of Selenium to automate the use cases	Apply
C32G.4	Build test scripts on automation of web based and windows-based applications	Create

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs) & Program Specific Outcomes (PSOs)

Date: 24-07-2020

Regulation : R18
Academic Year & Sem : 2020 -21 & Sem-II
JNTUH Course Code : MC609
Course Name : Environmental Sciences
Branch : CSE
Course Coordinators : Ms.Mounika

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32H.1	Discover knowledge regarding the environment and its components.	Analyze
C32H.2	Understand the classification, importance and conservation of natural resources.	Apply
C32H.3	Perceive the knowledge regarding different Bio -Geo classification of India.	Evaluate
C32H.4	Examine impacts of pollution on the environment and their control measures.	Analyze
C32H.5	Analyze Environmental laws and Environmental Impact Assessments.	Analyze
C32H.6	Determine sustainable development that aims to meet raising human needs.	Evaluate

Academic Year & Sem : 2020-21 & Sem-II
JNTUH Course Code :
Course Name : Cyber Security
Branch : CSE
Course Coordinators : Ms. G E Padmavati & Ms. Suparna Das

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32I.1	Analyze and evaluate the cyber security needs of an organization	Analyze
C32I.2	Determine and analyze software vulnerabilities and security solutions to reduce the risk of exploitation	Analyze
C32I.3	Implement cyber security solutions and use of cyber security, information assurance, and cyber/computer forensics software/tools.	Apply
C32I.4	Comprehend and execute risk management processes, risk treatment methods, and key risk and performance indicators	Evaluate
C32I.5	Design and develop a security architecture for an organization.	Create
C32I.6	Design operational and strategic cyber security strategies and policies.	Create

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Date: 18-07-2020

Regulation : R18
Academic Year & Sem : 2020-21 III- II Sem
JNTUH Course Code : EC606PC
Course Name : Scripting Languages Lab
Branch : ECE
Course Coordinators : Dr.G.Naga Satish, Mr K Bhargav Ram

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32I.1	Design and test programs to solve mathematical problems	Create
C32I.2	Develop programs Using Ruby Script	Create
C32I.3	Develop Programs Using TCL Script	Create
C32I.4	Develop Programs Using Perl Script	Create

Regulation : R18
Academic Year & Sem : 2020-21 III & II
JNTUH Course Code : EC611PE
Course Name : OOPS THROUGH JAVA
Branch : ECE
Course Coordinators : Mr M Bapiraju , Ms B Sneha

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C32H.1	Develop problem-solving and programming skills using OOP concepts	Apply
C32H.2	Make use of Interfaces, Abstract classes and packages for Java applications	Apply
C32H.3	Make Use of I/O functionality to read from and write to text files	Apply
C32H.4	Analyze multithreading and exception handling mechanism for java applications	Analyze
C32H.5	Utilize Collections in Java Application to store and Manipulate the data	Evaluate
C32H.6	Build GUI applications using Applet, AWT and Swings	Create

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date: 12-04-2021

Regulation : R18
Academic Year & Sem : 2021-22 & Sem-I
JNTUH Course Code : CS701PC
Course Name : Cryptography and Network Security
Branch : CSE
Course Coordinators : Ms G Nagamani , Ms. A. Naga Kalyani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C411.1	Illustrate the concepts and principles of security Attacks, Services and Mechanisms.	Analyze
C411.2	Evaluate applications of Cryptographic algorithms in real time scenarios.	Evaluate
C411.3	Demonstrate the techniques like Message authentication, Hash function and public key encryption.	Analyze
C411.4	Solve the network security issues using available security solutions.	Create
C411.5	Assess different key management techniques and solutions for web security.	Evaluate
C411.6	Analyze various case studies to identify the security vulnerabilities and prevention techniques.	Analyze

Regulation : R18
Academic Year & Sem : 2021-2022 ,Sem-I
JNTUH Course Code : CS702PC
Course Name : Data Mining
Branch : CSE
Course Coordinators : Ms. D Swapna, Ms. G Nagamani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C412.1	Examine data mining tasks, KDD process and challenges.	Analyze
C412.2	Apply Data Preprocessing techniques to make data sets ready to be mining.	Apply
C412.3	Identify the frequent patterns and association rules from transactional datasets.	Apply
C412.4	Classify the real world data into appropriate classes using various supervised learning techniques and measure its performance.	Evaluate
C412.5	Apply clustering and outlier detection techniques on given data sets and evaluate goodness measures.	Evaluate
C412.6	Classify web pages and extract knowledge from the web and text data.	Apply

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem : 2020-21, Sem-I
JNTUH Course Code : CS711PE
Course Name : Graph Theory
Branch : CSE
Course Coordinators : Mr S K Hiremath & Dr N Sreekanth

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C413.1	Know some important classes of graph-theoretic problems and the usage of graph theory as a modeling tool.	Create
C413.2	Formulate the central theorems about trees, matching, connectivity, coloring, and planar graphs.	Apply
C413.3	Describe some basic algorithms for graphs.	Analyze
C413.4	The Graph theory as a Modeling tool presentable in Applications.	Create
C413.5	Learn the fundamental concepts in graph theory in view of its applications in modern science and create mathematical proofs.	Create
C413.6	Use the concepts of Graph theory in subsequent courses in the design and analysis of Graph algorithms.	Analyze

Regulation : R18
Academic Year & Sem : 2021-2022 ,Sem-I
JNTUH Course Code : CS712PE
Course Name : Introduction to Embedded Systems
Branch : CSE
Course Coordinators : Ms M Praveena , Mr Mahesh babu

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C414.1	Distinguish the embedded systems from general purpose processing systems.	Analyze
C414.2	Recommend suitable hardware for different applications of embedded systems.	Evaluate
C414.3	Select different types and amounts of memory based on embedded system specifications.	Evaluate
C414.4	Discuss the Embedded firmware design approaches, development languages and device drivers	Analyze
C414.5	Analyze the issues and techniques of Task synchronization and communication in embedded firmware.	Analyze
C414.6	Differentiate between general purpose operating systems and RTOS.	Analyze

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date: 17-04-2021

Regulation : R18
Academic Year & Sem : 2021-22, Sem-I
JNTUH Course Code : CS713PE
Course Name : Artificial Intelligence
Branch : CSE
Course Coordinators : Mr U Chandra Shekar, Ms A Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C415.1	To Formulate different search Algorithms and developing problem solving ability	Analyze
C415.2	Understand propositional logic and identify constraints satisfaction problems	Understand
C415.3	Improve logic and draw the inferences	Analyze
C415.4	Ability to do reasoning and knowledge representation for various categories of information	Create
C415.5	Define various classical planning approaches applied to real world	knowledge
C415.6	Understand probabilistic reasoning and various learning mechanisms	Understand

Regulation : R18
Academic Year & Sem : 2020-2021,Sem-I
JNTUH Course Code : CS714PE
Course Name : Cloud Computing
Branch : CSE
Course Coordinators : Mr. K. Bhargav Ram,Mr M Bapiraju

With reference to the guide lines provided by DAC and mapping COs with the relevant Pos following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C416.1	Understand various types of computing paradigms.	Analyze
C416.2	Identify the need for Cloud Computing and its essential characteristics.	Apply
C416.3	Analyze Cloud architecture, network connectivity and its applications.	Apply
C416.4	Analyze management in Cloud infrastructure and approaches of Cloud migration.	Analyze
C416.5	Identify Cloud environments using Infrastructure as a Service (IaaS), PaaS and SaaS.	Evaluate
C416.6	Analyze the Cloud era by different platforms.	Apply

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Date:13.04.2021

Regulation : R18
Academic Year & Sem : 2021-22, Sem-I
JNTUH Course Code :CS715P
Course Name :Adhoc and Sensors Networks
Branch : CSE
Course Coordinators :Ms. A.Kranthi,Ms.P Kavitha

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C417.1	Apply the basic characteristics and routing in Mobile Ad-hoc Networks (MANETS)	Apply
C417.2	Analyze the data transmission in MANETs and the usage of TCP over MANETs and understand MANETs and WSN for Industry and research point	Analyze
C417.3	Ability to solve the issues in real time application development based on Geocasting	Evaluate
C417.4	Demonstrate the ability to solve security related problems using Routing protocols	Analyze
C417.5	Understand the basics of WSN and various layers	Understand
C417.6	Choose appropriate tools for WSN simulation	Apply

Regulation : R18
Academic Year & Sem : 2021-2022
,Sem-I JNTUH Course Code : CS721PE
Course Name : Advanced Algorithms
Branch : CSE
Course Coordinators : Dr N Sreekanth, Mr. C Nagaraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C418.1	Analyze complex problems using advanced data structures	Analyze
C418.2	Analyze complex problems using advanced data structures (stacks, queues, linked lists, graphs and trees)	Analyze
C418.3	Model real life problem using different algorithm design techniques	Apply
C418.4	Apply different design techniques to solve network related problems.	Apply
C418.5	Choose proper pattern matching algorithm for given problem	Analyze
C418.6	Analyze NP and NP hard problems	Analyze

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Date: 12-04-2021

Regulation : **R18**
Academic Year & Sem : **2011-22, I Sem**
JNTUH Course Code : **CS852PE**
Course Name : **Real- Time Systems**
Branch : **CSE**
Course Coordinators : **Ms P Kavitha, Ms Suparna Das**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C419.1	Apply the commands for file I/O and process Control	Apply
C419.2	Implement time management & task management in the real time operating systems	Evaluate
C419.3	Analyze the communication among processes during concurrency	Analyze
C419.4	Configure different components of I/O	Analyze
C419.5	Handle Exceptions & Interrupts	Evaluate
C419.6	Distinguish functionalities of various real time operating systems namely RT Linux,Vx Works,MicroC/OS-II, Tiny OS and Embedded Linux	Analyze

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem :2021-22 IV Sem-I
JNTUH Course Code : CS723PE
Course Name : Soft Computing
Branch : CSE
Course Coordinators : Ms B Nagaveni, Mr M D Sugnana Rao

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C41A.1	Identify the difference between hard and soft computing	Apply
C41A.2	Understand fuzzy logic and reasoning to handle and solve engineering problems	Understand
C41A.3	Identify the difference between problem solving and decision making	Apply
C41A.4	Implement the particle swarm optimizations for various applications	Apply
C41A.5	Perform various operations of genetic algorithms, Rough Sets.	Analyze
C41A.6	Create various models to integrate soft computing techniques	Evaluate

Regulation : R18
Academic Year & Sem : 2021-22, I Sem
JNTUH Course Code : CS724PE
Course Name : Internet of Things
Branch : CSE
Course Coordinators : Dr. N.Sreekanth & Mr K Naresh

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C41B.1	Inference the impact and challenges posed by IoT networks leading to new architectural models.	Analyze
C41B.2	Compare and contrast the deployment of smart objects and the technologies to connect them to network.	Analyze
C41B.3	Appraise the role of IoT protocols for efficient network communication.	Evaluate
C41B.4	Elaborate python programming with various interfacing devices using with Raspberry PI.	Create
C41B.5	Illustrate different sensor technologies for sensing real world entities and identify the applications of IoT in Industry.	Apply
C41B.6	Construct a restful web API.	Create

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Date: 20-04-2021

Regulation : R18
Academic Year & Sem : 2021-22, I Sem
JNTUH Course Code : CS734PE
Course Name : Software Process and Project Management
Branch : CSE
Course Coordinators : Ms D Swapna & Mr K Bhargav Ram

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C41C.1	Analyze the Software process maturity levels for Process Improvement and Process Assessment.	Analyze
C41C.2	Explore the Software Management Renaissance in Economics.	Analyze
C41C.3	Evaluate Life cycle phases and Artifacts in Project Management.	Evaluate
C41C.4	Examine the role of workflows and checkpoints in process planning.	Analyze
C41C.5	Illustrate the importance of Project Organization, Project control and process instrumentation in Project Management.	Analyze
C41C.6	Evaluate the Project management practices with Case Studies.	Evaluate

Regulation : R18
Academic Year & Sem : 2021-22, I Sem
JNTUH Course Code : EC700OE
Course Name : Electronic Sensors
Branch : CSE
Course Coordinators : Ms Amy Prasanna , Ms Ramalakshmi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C41D.1	Illustrate the characteristics and operating principles of Sensors	Analyze
C41D.2	Summarize the construction and operation of various Electro Mechanical Sensors.	Understand
C41D.3	Analyze the working principles and applications of different Thermal Sensors	Analyze
C41D.4	Explore the working principles of different Magnetic Sensors	Apply
C41D.5	Utilize Radiation and Electro Analytical Sensors to compute radiation and various electrical parameters.	Analyze
C41D.6	Make use of smart sensors to measure different physical parameters and apply them in various Fields	Apply

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Date:12.04.2021

Regulation : R18
Academic Year & Sem : 2021-22, I Sem
JNTUH Course Code : CS703PC
Course Name : Cryptography & Network Security Lab
Branch : CSE
Course Coordinators : Ms G Nagamani,Ms A Naga Kalyani

With reference to the guidelines provided by DAC and mapping CO's with the relevant PO's following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C41E.1	Compare various cryptographic techniques to encode and decode the given text.	Understand
C41E.2	Develop solutions using symmetric key algorithms.	Create
C41E.3	Build solutions using public key cryptographic algorithms.	Apply
C41E.4	Analyze various secure hash algorithms to generate hash key.	Analyze

Regulation : R18
Academic Year & Sem : 2021-22 Sem-I
JNTUH Course Code : CS705PC
Course Name : Seminar
Branch : CSE & IT
Course Coordinators : Dr N Sreekanth , Mr C Nagaraju

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C41F.1	Identify emerging topic specific to the programme.	Apply
C41F.2	Extract the information relevant to the chosen topic.	Analyze
C41F.3	Deliver the knowledge using multimedia.	Apply
C41F.4	Answer the queries with appropriate explanation and elaboration.	Apply
C41F.5	Compile an effective technical report, providing conclusions and proposing an appropriate future scope.	Analyze

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Date: 18-04-2021

Regulation : **R18**
Academic Year & Sem : **2021-22 Sem-I**
JNTUH Course Code : **CS706PC**
Course Name : **Project Stage – I**
Branch : **CSE & IT**
Course Coordinators : **Mr U.Chandra sekhar, Dr Kayal Padmanabhan**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C41G.1	Identify problems, conduct literature surveys and formalize them.	Apply
C41G.2	Analyze and propose an efficient, cost-effective and eco-friendly solution using relevant tools and technologies.	Analyze
C41G.3	Finalize the design plan and implement at least one module of the project.	Create
C41G.4	Demonstrate effective communication and report writing skills.	Apply
C41G.5	Recognize the need for team work and exhibit professional ethics.	Apply

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem :2021-22 & Sem-I
JNTUH Course Code : CS700OE
Course Name : Data Structures
Branch : ECE
Course Coordinators : Dr A Vasanthi,Ms B Nagaveni

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C418.1	Implement various operations on linear data structures to solve real world problems.	
C418.2	Design solutions using Dictionaries and Hash Tables.	Create
C418.3	Implement various kinds of trees and their operations.	Evaluate
C418.4	Represent graphs and traverse them.	Analyze
C418.5	Choose an appropriate sorting algorithm.	Apply
C418.6	Examine Pattern matching algorithms and Tries.	Analyze

Regulation : R18
Academic Year & Sem : 2021-22 & Sem-I
JNTUH Course Code : EC722PE
Course Name : DATABASE MANAGEMENT SYSTEMS
Branch : ECE
Course Coordinators : Ms G Shanti , Ms. C Jagadeeswari

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C416.1	Demonstrate the basic elements of a database management system and the conceptual design of databases with the help of Entity-Relationship model.	Analyze
C416.2	Construct Relational Model by converting Entity-Relationship Model	Create
C416.3	Apply SQL queries for database management	Apply
C416.4	Apply normalization on schema to reduce data redundancy and increase data consistency.	Apply
C416.5	Test transaction, concurrency control models and recovery mechanisms on database.	Evaluate
C416.6	Classify different storage devices and indexing methods.	Apply

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem : 2021-22 & Sem-I
JNTUH Course Code : EC711PE
Course Name : Artificial Neural Networks
Branch : ECE
Course Coordinators : Mr K Rajesh,Ms A Kranthi

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C412.1	Infer the similarity of Biological networks and Neural networks	Analyze
C412.2	Understand the architecture and learning algorithms	Understand
C412.3	Perform the training of neural networks using various learning rules.	Evaluate
C412.4	Analyze the concepts of backward propagations.	Analyze
C412.5	Applying SOM for computer simulation.	Apply
C412.6	Analyze and construct the Hopfield models.	Analyze

Regulation : R18
Academic Year & Sem :2021-22 & Sem-I
JNTUH Course Code : EC712PE
Course Name : Scripting Languages
Branch : ECE
Course Coordinators : Dr G Naga Satish,Ms Suparna Das

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C413.1	Make use of resources to gain some fluency programming in Linux, Perl, TCL/TK, Python	
C413.2	Elaborate about the basics of Linux and Linux Networking.	Create
C413.3	Understanding the Perl by utilizing the features	Evaluate
C413.4	Explain various features of TCL Scripting	Analyze
C413.5	Examine the TK by embedding in different ways	Apply
C413.6	Elaborate features of Python	Analyze

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem : 2021-22 & Sem-I
JNTUH Course Code : EC723PE
Course Name : Network Security and Cryptography
Branch : ECE
Course Coordinators : Dr A Vasanthi,Ms G Nagamani

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C417.1	Illustrate the concepts and principles of security Attacks, Services and Mechanisms.	
C417.2	Evaluate applications of Cryptographic algorithms in real time scenarios.	Create
C417.3	Apply various public key cryptography techniques	Evaluate
C417.4	Demonstrate the techniques like Message authentication, Hash function and Authentication applications.	Analyze
C417.5	Assess different key management techniques and solutions for web security.	Apply
C417.6	Analyze various case studies to identify the security vulnerabilities and prevention techniques.	Analyze

Regulation : R18
Academic Year & Sem : 2021-22, II Sem
JNTUH Course Code : EE833OE
Course Name : Organizational Behavior
Branch : CSE
Course Coordinators : Dr.S Kalyan

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C421.1	Analyze the behavior of individuals and groups in Organizations	Analyze
C421.2	Analyze the factors that influence Organizational behavior	Analyze
C421.3	Examine the potential effects of organizational level factors on organizational behavior.	Apply
C421.4	Analyze potential effects of important developments in the external environment on Organizational behavior.	Analyze
C421.5	Examine the role of globalization and advances in technology on Organizational behavior.	Apply
C421.6	Analyze organizational behavior theories, models and concepts.	Analyze

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem : 2021-22, II Sem
JNTUH Course Code : CS741PE
Course Name : Computational Complexity
Branch : CSE
Course Coordinators : Mr K Rajesh & Mr M D Sugnana Rao

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C422.1	Analyze the computational complexity and classify algorithms into appropriate complexity classes.	Analyze
C422.2	Construct reduction of problems.	Analyze
C422.3	Analyze algorithmic paradigms and choose appropriate paradigm for a given problem.	Analyze
C422.4	Choose appropriate randomized algorithms for pattern recognition.	Apply
C422.5	Compare various graph based algorithms for approximation and randomization problems.	Evaluate
C422.6	Apply suitable data structure for complex applications.	Apply

Regulation : R18
Academic Year & Sem :2021-22 ,Sem-II
JNTUH Course Code : CS812PE
Course Name : Distributed Systems
Branch : CSE
Course Coordinators : Dr N Sreekanth,Mr C Nagaraju

With reference to the guidelines provided by DAC and mapping Cos with the relevant Pos following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C423.1	Classify the various distributed systems, challenges and models.	Apply
C423.2	Evaluate the importance of clock, process synchronization and debugging of distributed systems.	Analyze
C423.3	Examine the protocol for inter process communication and distributed objects.	Analyze
C423.4	Explore distributed file systems, naming services and shared memory for distributed systems.	Analyze
C423.5	Categorize the distinct transactions mechanism and locks.	Apply
C423.6	Inspect concurrency control and recovery mechanisms for distributed systems.	Analyze

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Date: 12-04-2021

Regulation : R18
Academic Year & Sem : 2021-22, II Sem
JNTUH Course Code : CS864PE
Course Name : Neural Network and Deep Learning
Branch : CSE
Course Coordinators : Dr G Naga Satish, Mr K Naresh

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C424.1	Ability to understand the concepts of Neural Networks	Understand
C424.2	Ability to select the Learning Networks in modeling real world systems	Apply
C424.3	Ability to understand deep learning architectures	Understand
C424.4	Ability to use an efficient algorithm for Deep Models	Evaluate
C424.5	Ability to use Regularizations for deep learning	Analyze
C424.6	Ability to apply optimization strategies for large scale applications	Create

Regulation : R18
Academic Year & Sem : 2021-22 Sem-II
JNTUH Course Code : CS814PE
Course Name : Human Computer Interaction
Branch : CSE
Course Coordinators : Ms A.Kranthi , Mr K.Bhargav Ram

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C425.1	Elaborate the design of good Interface and features of GUI	Analyze
C425.2	Compare the Human interaction speed with computers	Analyze
C425.3	Apply visually pleasing composition of elements on screen design	Analyze
C425.4	Identify Various Navigation Schemes, Screen based controls in user interface design	Apply
C425.5	Design effective HCI for individuals	Create
C425.6	Ability to design certain tools for blind or PH people.	Create

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Date: 13-04-2021

Regulation : R18
Academic Year & Sem : 2021-22 , Sem- II
JNTUH Course Code : CS815PE
Course Name : Cyber Forensics
Branch : CSE
Course Coordinators : Ms. E G Padmavati & Ms. Suparna Das

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings.

CO NO.	Course Outcomes	Blooms level
C426. 1	Understand the fundamentals of Cyber Crime	Analyze
C426.2	Analyze the nature and effect of cybercrime in society.	Analyze
C426.3	Demonstrate Accounting Forensics.	Apply
C426.4	Analyze Computer Crime and Criminals and Liturgical Procedures.	Analyze
C426.5	Apply the laws and regulations to the applications	Apply
C426.6	Analyze the email tracking cyber applications.	Analyze

Regulation : R18
Academic Year & Sem : 2020-21 & IV-II
JNTUH Course Code : EE800OE
Course Name : BASICS OF POWER PLANT ENGINEERING
Branch : CSE
Course Coordinators : Ms. Amrutha, Ms Babita Gupta

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C427.1	Understand the components and layouts of various power plants.	Understand
C427.2	Analyse Rankine Cycle in coal based power plants and Brayton Cycle in Gas turbine power plants	Analyze
C427.3	Elucidate various nuclear reactors	Understand
C427.4	Discuss the principles of various non conventional energy power plants	Understand
C427.5	Examine the economic aspects for electrical power generation	Analyze
C427.6	Apply various pollution control techniques in power plants.	Apply

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Course Outcomes (COs) & Mapping of COs to Program Outcomes (POs)& Program Specific Outcomes (PSOs)

Date: 17-04-2021

Regulation : **R18**
Academic Year & Sem : **2021-22 Sem-II**
JNTUH Course Code : **CS802PC**
Course Name : **Project Stage - II**
Branch : **CSE & IT**
Course Coordinators : **Mr U.Chandra Sekhar, Dr G Naga Satish**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO NO.	Course Outcomes	Blooms level
C428.1	Implement the remaining modules or features of the project complying with timelines.	Create
C428.2	Demonstrate the functionality of the project and evaluate the results.	Evaluate
C428.3	Derive the conclusion to provide scope for future enhancement.	Analyze
C428.4	Integrate the findings of Stage-I & Stage-II and prepare a comprehensive report.	Apply
C428.5	Exhibit technical, interpersonal and leadership skills with individual contribution.	Apply

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Date: 18-04-2021

Regulation : **R18**
Academic Year & Sem : **2021-22, II Sem**
JNTUH Course Code : **CS801OE**
Course Name : **MOBILE APPLICATION DEVELOPMENT (OPEN ELECTIVE - III)**
Branch : **ECE**
Course Coordinators : **Mr Shivamurthy Hiremath,Mr K Naresh**

With reference to the guidelines provided by DAC and mapping COs with the relevant POs following are the Course Outcomes and CO-PO-PSO mappings

CO No.	Course Outcomes	Blooms level
C423.1	Students understand the working of Android OS practically.	Analyze
C423.2	Students will be able to develop Android user interfaces.	Apply
C423.3	Students will be able to develop, deploy and maintain the Android Applications.	Analyze
C423.4	Build a native application using GUI components and Mobile application development framework.	Apply
C423.5	Develop an application using basic graphical primitives and databases	Evaluate
C423.6	Model new applications to hand held devices.	Analyze