

#### **BEARYS INSTITUTE OF TECHNOLOGY** DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Bearys Knowledge Campus, Lands End, Innoli, Near Mangalore University, Mangalore – 574199

## **COURSE OUTCOMES - 2020 SCHEME (PG)**

#### 1<sup>st</sup> SEMESTER

Subject:	Mathematical Foundations of Computer Science			
Subject Code:	20SCS11	NBA Code:	20PSCS101	
CO1	Understand the numerical methods to sol	ve and find the	roots of the equations.	
CO2	Apply the technique of singular value decomposition for data compression, least square approximation in solving inconsistent linear systems			
CO3	Understand vector spaces and related topics arising in magnification and rotation of images			
CO4	Utilize the statistical tools in multi variable distributions			
CO5	Use probability formulations for new pre RV's	Use probability formulations for new predictions with discrete and continuous		

Subject:	Artificial Intelligence and Machine Learning		
Subject Code:	20SCS12	NBA Code:	20PSCS102
CO1	Define Artificial intelligence and identify problems for AI. Characterize the search techniques to solve problems and recognize the scope of classical search techniques		
CO2	Define knowledge and its role in AI. Demonstrate the use of Logic in solving AI problems		
CO3	Demonstrate handling of uncertain knowledge and reasoning in probability theory		
CO4	Understanding of Learning methods		

Subject:	Advanced Database Management Systems				
Subject Code:	20SCS13 NBA Code: 20PSCS103				
CO1	Select the appropriate high-performance database like parallel and distributed database				
CO2	Infer and represent the real-world data using object-oriented database				
CO3	Interpret rule set in the database to implement data warehousing of mining				
CO4	Discover and design database for recent applications database for better interoperability				

Subject:	Advanced Algorithms		
Subject Code:	20SCS14	NBA Code:	20PSCS104
CO1	Design and apply iterative and recursive algorithms.		
CO2	Design and implement optimization algorithms in specific applications		
CO3	Design appropriate shared objects and co	oncurrent objects	s for applications



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Subject:Internet of Things and ApplicationsSubject Code:20SCS15NBA Code:20PSCS105CO1Develop schemes for the applications of IOT in real time scenariosCO2Manage the Internet resourcesCO3Model the Internet of things to businessCO4Understand the practical knowledge through different case studies

Subject:	Algorithms and Database Management Systems Laboratory		
Subject Code:	20SCSL16	NBA Code:	20PSCS106
CO1	Work on the concepts of Software Testing and ADBMS at the practical level and Compare and pick out the right type of software testing process for any given real-world problem		
CO2	Carry out the software testing process in efficient way		
CO3	Establish a quality environment as specified in standards for developing quality software		
CO4	Model and represent the real-world data using object-oriented database		
CO5	Embed the rules set in the database to implement various features of ADBMS and Choose, design and implement recent applications database for better interoperability.		

Subject:	Research Methodology and IPR		
Subject Code:	20RMI17	NBA Code:	20PSCS107
CO1	Discuss research methodology and defini	ing a research pi	roblem
CO2	Explain functions of literature review, conducting a literature search, and developing theoretical frameworks		
CO3	Explain research designs, sampling techniques, measurement methods, and data collection		
CO4	Explain parametric tests, Chi-square test, interpretation of results, and writing research reports		
CO5	Discuss forms of intellectual property, their relevance in business, and leading international IPR instruments		



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# COURSE OUTCOMES - 2020 SCHEME (PG)

#### 2<sup>nd</sup> SEMESTER

Subject:	Data Science			
Subject Code:	20SCS21 NBA Code: 20PSCS108			
CO1	Define data science and its fundamentals			
CO2	Demonstrate the process in data science			
CO3	Explain machine learning algorithms necessary for data sciences			
CO4	Illustrate the process of feature selection and analysis of data analysis algorithms			
CO5	Visualize the data and follow of ethics			

Subject:	Semantic Web and Social Networks			
Subject Code:	20SCS22 NBA Code: 20PSCS109			
CO1	Demonstrate the semantic web technologies like RDF Ontology and others			
CO2	Learn the various semantic web applications			
CO3	Identify the architectures and challenges in building social networks			
CO4	Analyse the performance of social networks using electronic sources			

Subject:	Blockchain Technology		
Subject Code:	20SCS23	NBA Code:	20PSCS110
CO1	Understand the types, benefits and limitation of blockchain.		
CO2	Explore the blockchain decentralization and cryptography concepts.		
CO3	Enumerate the Bitcoin features and its alternative options		
CO4	Describe and deploy the smart contracts		
CO5	Summarize the blockchain features outside of currencies		

Subject:	Object Oriented Design			
Subject Code:	20SCS252 NBA Code: 20PSCS111			
CO1	Identify the heuristics of the object-oriented programming			
CO2	Explain the fundamentals of OOP			
CO3	Examine fine object-oriented relations			
CO4	Explain the role of Physical Object-Oriented Design,			
CO5	Make use of Heuristics in The Use of Heuristics in Object-Oriented Design			

Subject:	Cloud Computing		
Subject Code:	20SCS243	NBA Code:	20PSCS112
CO1	Compare the strengths and limitations of cloud computing		
CO2	Identify the architecture, infrastructure and delivery models of cloud computing		
CO3	Apply suitable virtualization concept and Address the core issues of cloud computing such as security, privacy and interoperability		
CO4	Design Cloud Services		
CO5	Set a private cloud		



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# 3<sup>rd</sup> SEMESTER

Subject:	Data Science Laboratory		
Subject Code:	20SCS31 NBA Code: 20PSCS201		
CO1	Demonstration of data visualization methods		
CO2	Understanding and implementation of data science algorithms		

Subject:	Engineering Economics		
Subject Code:	20SCS321	NBA Code:	20PSCS202
CO1	Describe the principles of economics that govern the operation of any organization under diverse market conditions		
CO2	Comprehend macroeconomic principles and decision making in diverse business set up		
CO3	Explain the Inflation & Price Change as well as Present Worth Analysis		
CO4	Apply the principles of economics through various case studies		

Subject:	Business Intelligence and its Applications		
Subject Code:	20SCS331	NBA Code:	20PSCS203
CO1	Explain the complete life cycle of BI/Analytical development		
CO2	Illustrate technology and processes associated with Business Intelligence framework		
CO3	Demonstrate a business scenario, identify the metrics, indicators and make recommendations to achieve the business goal		

Subject:	Project Work Phase – 1		
Subject Code:	20SCS34	NBA Code:	20PSCS204
CO1	Demonstrate a sound technical knowledge of their selected project topic.		
CO2	Undertake problem identification, formulation, and solution		
CO3	Design engineering solutions to complex problems utilising a systems approach		
CO4	Communicate with engineers and the community at large in written an oral		
004	forms		
CO5	Demonstrate the knowledge, skills and attitudes of a professional engineer		

Subject:	Mini Project		
Subject Code:	20SCS35	NBA Code:	20PSCS205
	Present the mini-project and be able to defend it and make links across different		
CO1	areas of knowledge and to generate, develop and evaluate ideas and inform		
	so as to apply these skills to the project task.		
CO2	Habituated to critical thinking and use problem solving skills		
<u> </u>	Communicate effectively and to present ideas clearly and coherently in both the		
CO3	written and oral forms		
CO4	Work in a team to achieve common goal		
CO5	Learn on their own, reflect on their learning and take appropriate actions to		
	improve it		



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Subject:	Internship / Professional Practice		
Subject Code:	20SCSI36	NBA Code:	20PSCS206
CO1	Gain practical experience within industry in which the internship is done and acquire knowledge of the industry in which the internship is done.		
CO2	Apply knowledge and skills learned to classroom work and Develop a greater understanding about career options while more clearly defining personal career goals		
CO3	Experience the activities and functions of professionals and Develop and refine oral and written communication skills.		
CO4	Identify areas for future knowledge and skill development and Expand intellectual capacity, credibility, judgment, intuition		
CO5	Acquire the knowledge of administration, marketing, finance and economics		



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## **COURSE OUTCOMES - 2020 SCHEME (PG)**

#### 4<sup>th</sup> SEMESTER

Subject:	Project Work Phase -2		
Subject Code:	20SCS41	NBA Code:	20PSCS207
	Present the project and be able to defend it and make links across different areas		
CO1	of knowledge and to generate, develop and evaluate ideas and information		
	as to apply these skills to the project task.		
CO2	Habituated to critical thinking and use problem solving skills		
CO3	Communicate effectively and to present ideas clearly and coherently in both the		
03	written and oral forms.		
CO4	Work in a team to achieve common goal		
CO5	Learn on their own, reflect on their learning and take appropriate actions to		
03	improve it		