Course Outcomes

MCA

Course Outcomes
2015 Scheme Onwards

MCA 5th sem		
MCA501	**Artificial Intelligence**	**1. describe the key components of the artificial intelligence (AI) field and its relation and role in Computer Science;** **2. identify and describe artificial intelligence techniques, including search heuristics, knowledge representation, automated planning and agent systems, machine learning, and probabilistic reasoning;** **3. identify and apply AI techniques to a wide range of problems, including complex problem solving via search, knowledge-base systems, machine learning, probabilistic models, agent decision making, etc.;** **4. Communicate clearly and effectively using the technical language of the field correctly.**
MCA502	**Design and analysis of algorithms**	**1. Become familiar with fundamental data structures.** **2. Learn how to analyze algorithms and estimate their worst-case and average-case behavior.** **3. Apply important algorithmic design techniques and become able to handle operations like Sorting and Searching.** **4. To design and implement non-linear data structure.**
MCA503	**Web Technologies**	**1. Describe the XML basics, Editors, Schemas and Document Object Model.** **2. Familiar with the AJAX, jQuery and working with events** **3. Description of Web Services its Uses & Types and Describe the concept of SOAP and JSON.** **4. Describe the concept of Content management System, Study of Word Press & Creation of Websites.**
MCA504	**Object Oriented Analysis & Design with UML**	**1. Understanding of basics object-oriented design methodology.** **2. Design of problem using object model involving class diagrams, object diagrams.** **3. Understanding the concepts of generalization and associations** **4. Design of problem using dynamic model involving state transition diagrams.**
MCA505	**Software Lab–XI(Web Technologies)**	**1. Analyze a web page and identify its elements and attributes.** **2. Create web pages using XHTML and Cascading Styles sheets** **3. Build web applications using PHP** **4. Create XML documents.** **5. Create XML Schema.** **6. Build and consume web services**
MCA506	**Software Lab–XII**	**1. Understanding the basic object-oriented**

	(Object Oriented Analysis and Design with UML)	**design methodology using UML.** **2. Implementation and design of problem using object model involving class diagrams, object diagrams using UML** **3. Implementation of the concepts of generalization and associations using UML.** **4. Implementation and design of problem using dynamic model involving state transition diagrams using UML.** **5. Implementation and design of problem using functional model involving data flow diagrams.** **6. Understand of basic design structures in UML.**

MCA 6th sem		
MCA601	**Data Warehousing & Mining**	**1. To understand operational database, Data ware housing, need of database to meet industrial needs.** **2. Identify the components in typical Data warehouse Architecture.** **3. To introduce Data Mining, its generic algorithms and Fuzzy set approach** **4. To introduce with the prediction and clustering methods.**
MCA602	**Cloud Computing**	**1. Understand various basic concepts related to cloud computing technologies** **2. Understand the architecture and concept of different cloud models: IaaS, PaaS, SaaS** **3. Understand the underlying principle of cloud virtualization, cloud storage, data management and data visualization.** **4. Be familiar with application development and deployment using cloud platforms** 5. **Learn to develop scalable applications using platforms like AWS, IBM and Microsoft Azure.**
MCA603	**Advanced Computer Architecture**	**1. Describe the principles of computer design, instruction set architectures, multi-coreprocessors & Hazards.** **2. Understand the Fundamentals of Memories** **3. Describe the operation of performance enhancements such as pipelines, dynamic scheduling, branch prediction, caches, and vector processors.** **4. Describe modern architectures such as RISC,**

		Super Scalar, VLIW **5. Understand the several advanced optimizations to achieve cache performance.**
MCA604	**Software Testing & Quality Management**	**1. Analyse different approaches to software testing and quality assurance, and select optimal solutions for different situations and projects** **2. Conduct independent research in software testing and quality assurance** **3. To understand how to apply that knowledge in their future research and practice** **4. Evaluate the work of peers constructively by following proven methods of peer-review, and by using the principles of research ethics.**
MCA605	**Software Lab– XIII(Software Testing)**	**1. To study fundamental concepts in software testing, including software testing objectives, process, criteria, strategies, and methods.** **2. To discuss various software testing issues and solutions in software unit test; integration, regression, and system testing** **3. To gain software testing experience by applying software testing knowledge and methods to practice-oriented software testing projects.** **4. To understand software test automation problems and solutions.** **5. To learn how to write software testing documents, and communicate with engineers in various forms.** **6. To gain the techniques and skills on how to use modern software testing tools to support software testing projects.**