### MCA PROGRAMME OUTCOMES (POS):

- **PO1:** Apply knowledge of computing fundamentals, computing specialization, mathematics, and domain knowledge appropriate for the computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.
- **PO2:** Identify, formulate, research literature, and solve *complex* Computing problems reaching substantiated conclusions using fundamental principles of Mathematics, Computing sciences, and relevant domain disciplines.
- **PO3:** Design and evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations.
- **PO4:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of information to provide valid conclusions.
- **PO5:** Create, select, adapt and apply appropriate techniques, resources, and modern computing tools to complex computing activities, with an understanding of the limitations.
- **P06:** Understand and commit to professional ethics and cyber regulations, responsibilities, and norms of professional computing practice.
- **PO7:** Recognize the need, and have the ability, to engage in independent learning for continual development as a Computing professional.
- **PO8:** Demonstrate knowledge and understanding of computing and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO9: Communicate effectively with the computing community, and with society at large, about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations, and give and understand clear instructions.
- **PO10:** Understand and assess societal, environmental, health, safety, legal, and cultural issues within local and global contexts, and the consequential responsibilities relevant to professional computing practice.
- **PO11:** Function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary environments.
- **PO12:** Identify a timely opportunity and using innovation to pursue that opportunity to create value and wealth for the betterment of the individual and society at large.

### **MBA PROGRAMME OUTCOMES (POS):**

- **PO1 Generic and Domain Knowledge** Ability to articulate, illustrate, analyze, synthesize and apply the knowledge of principles and frameworks of management and allied domains to the solutions of real-world complex business issues.
- PO2 Problem Solving & Innovation Ability to Identify, formulate and provide innovative solution frameworks to real world complex business and social problems by systematically applying modern quantitative and qualitative problem solving tools and techniques.
- PO3 Critical Thinking Ability to conduct investigation of multidimensional business problems using research based knowledge and research methods to arrive at data driven decisions.
- **PO4 Effective Communication** Ability to effectively communicate in cross-cultural settings, in technology mediated environments, especially in the business context and with society at large.
- **PO5 Leadership and Team Work** Ability to collaborate in an organizational context and across organizational boundaries and lead themselves and others in the achievement of organizational goals and optimize outcomes for all stakeholders.
- P06 lobal Orientation and Cross-Cultural Appreciation- Ability to approach any relevant business issues from a global perspective and exhibit an appreciation of Cross Cultural aspects of business and management.
- **P07 Entrepreneurship** Ability to identify entrepreneurial opportunities and leverage managerial & leadership skills for founding, leading & managing startups as well as professionalizing and growing family businesses.
- PO8 Environment and Sustainability Ability to demonstrate knowledge of and need
  for sustainable development and assess the impact of managerial decisions and business
  priorities on the societal, economic and environmental aspects.
- PO9 Social Responsiveness and Ethics Ability to exhibit a broad appreciation of the
  ethical and value underpinnings of managerial choices in a political, cross-cultural,
  globalized, digitized, socio-economic environment and distinguish between ethical and
  unethical behaviors & act with integrity.
- **PO10 Life Long Learning** Ability to operate independently in new environment, acquire new knowledge and skills and assimilate them into the internalized knowledge and skills.



## **TECHNICAL CAMPUS AKOLE**

At./Post. Tal. Akole, Dist. Ahmednagar – 422 601

Tel. 02424 221123/24, Web. www.atestc.edu.in, email- akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES
				SEMESTER I
			CO1	Understand Basic Concepts of OOPs, Java, Inheritance, Package. (Understand)
			CO2	Understand Exception handling, arrays and Strings and multi-threading in Java (Understand.)
	IT11	Java Programming	CO3	Understand collection framework (Understand)
			CO4	Develop GUI using Abstract Windows Toolkit (AWT) and event handling (Apply)
			CO5	Develop Web application using JSP and Servlet, JDBC (Apply)
			CO1	Demonstrate linear data structures linked list, stack and queue (apply)
		Data Structure and Algorithms	CO2	Implement tree, graph, hash table and heap data structures (apply)
	IT12		CO3	Apply brute force and backtracking techniques (apply)
			CO4	Demonstrate greedy and divide-conquer approaches (apply)
			CO5	Implement dynamic programming technique (apply)
			CO1	Distinguish different process model for a software development. (Understand)
		Object Oriented Software Engineering	CO2	Design software requirements specification solution for a given problem definitions of a software system. (Analyze)
	IT13		CO3	Apply software engineering analysis/design knowledge to suggest solutions for simulated problems (Analyze)
			CO4	Design user interface layout for different types of applications (Apply)
FIRST YEAR (SEM-I , TERM-I)			CO5	Recognize and describe current trends in software engineering (Understand)
			CO1	Understand structure of OS, process management and synchronization. (Understand)
		Operating Systems Concepts	CO2	Understand multicore and multiprocessing OS. (Understand)
	IT14		CO3	Explain Realtime and embedded OS (Understand)
			CO4	Understand Windows and Linux OS fundamentals and administration. (Understand)
			CO5	Solve shell scripting problems (Apply)

		C01	Understand the basic concepts of Computer Network, and principle of layering (Understand)
		CO2	Apply the error detection and correction techniques used in data transmission (Apply)
IT15	Network Technologies	CO3	Apply IP addressing schemes and sub netting (Apply)
		CO4	Understand the concept of routing protocols, Application layer protocols and Network Security (Understand)
		CO5	Apply the socket programming basics to create a simple chat application (Apply)
	Practicals	CO1	Demonstrate Collection framework (Apply)
IT11L		CO2	Develop GUI using awt and swing (Apply)
HILL		CO3	Develop Web application using JSP and Servlet, JDBC (Apply)
		CO4	Apply Data Structure to solve problems using JavaScript (Apply)
ITC11	Mini Project	C01	Create working project using tools and techniques learnt in this semester (Create)



## **TECHNICAL CAMPUS AKOLE**

At./Post. Tal. Akole, Dist. Ahmednagar – 422 601

Tel. 02424 221123/24, Web. www.atestc.edu.in, email- akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES
				SEMESTER II
			CO1	Understand Demonstrate the concepts of python and modular programming. (Understand)
			CO2	Apply the concepts of concurrency control in python (Apply)
	IT21	Python Programming	CO3	Solve the real-life problems using object-oriented concepts and python libraries (Apply)
			CO4	Demonstrate the concept of IO, Exception Handling, database (Apply)
			C05	Analyze the given dataset and apply the data analysis concepts and data visualization. (Analyze)
			CO1	Understand the process of Software Project Management Framework and Apply estimation techniques. (Apply)
			CO2	Learn the philosophy, principles and lifecycle of an agile project. (Understand)
	IT22	Software Project Management	CO3	Demonstrate Agile Teams and Tools and Apply agile project constraints and trade-offs for estimating project size and schedule (Apply)
			CO4	Explain Project Tracking and Interpretation of Progress Report (Understand)
			C05	Analyze Problem statement and evaluate User Stories (Analyze)
			C01	Understand the role and principles of optimization techniques in business world (Understand)
			CO2	Demonstrate specific optimization technique for effective decision making (Apply)
	MT21	Optimization Techniques	CO3	Apply the optimization techniques in business environments (Apply)
FIRST YEAR (SEM-			CO4	Illustrate and infer for the business scenario (Analyze)
II , TERM-II)			CO5	Analyze the optimization techniques in strategic planning for optimal gain. (Analyze)
			C01	Outline the basic concepts of Advance Internet Technologies (Understand)
			CO2	Design appropriate user interfaces and implements webpage based on given problem Statement (Apply)
	IT23	Advanced Internet Technologies	CO3	Implement concepts and methods of NodeJS (Apply)
			CO4	Implement concepts and methods of Angular (Apply)
			CO5	Build Dynamic web pages using server-side PHP programming with Database Connectivity (Apply)
			CO1	Describe the core concepts of DBMS and various databases used in real applications (Understand)

		CO2	Design relational database using E-R model and normalization (Apply)
IT24	IT24 Advanced DBMS	C03	Demonstrate XML database and nonprocedural structural query languages for data access (Apply)
		CO4	Explain concepts of Parallel, Distributed and Object-Oriented Databases and their applications (Understand)
		CO5	Apply transaction management, recovery management, backup and security – privacy concepts for database applications (Apply)
IT21L	IT21L Practicals	CO1	implement python programming concepts for solving real life problems. (Apply)
1121b Fracticals	CO2	Implement Advanced Internet Technologies (Apply)	
ITC21	Mini Project	C01	Create working project using tools and techniques learnt in this semester (Create)



## **TECHNICAL CAMPUS AKOLE**

At./Post. Tal. Akole, Dist. Ahmednagar – 422 601

Tel. 02424 221123/24, Web. www.atestc.edu.in, email- akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

YEAR	YEAR COURSE CODE COURSE NAME		COURSE OUTCOME NO.	COURSE OUTCOMES
				SEMESTER III
			CO1	Understand Various Mobile Application Architectures. (Understand)
			CO2	Apply different types of widgets and Layouts. (Apply)
	IT31	Mobile Application Development	CO3	Describe Web Services and Web Views in mobile applications. (Understand)
			CO4	Implement data storing and retrieval methods in android. (Apply)
			CO5	Demonstrate Hybrid Mobile App Framework. (Apply)
			CO1	Understand Data warehouse concepts, architecture and models (Understand)
		Data Warehousing and Data Mining	CO2	Learn and understand techniques of preprocessing on various kinds of data (Understand)
	IT32		CO3	Apply association Mining and Classification Techniques on Data Sets (Apply)
			CO4	Apply Clustering Techniques and Web Mining on Data Sets (Apply)
			CO5	Understand other approaches of Data mining (Understand)
			CO1	Understand the role of software quality assurance in contributing to the efficient delivery of software solutions. (Understand)
		Software Testing and Quality Assurance	CO2	Demonstrate specific software tests with well-defined objectives and targets. (Apply)
SECOND YEAR (SEM-	IT33		CO3	Apply the software testing techniques in commercial environments. (Apply)
			CO4	Construct test strategies and plans for software testing. (Analyze)
III,TERM-I)			CO5	Demonstrate the usage of software testing tools for test effectiveness, efficiency and coverage (Apply)
			CO1	Understand basic building block of Artificial Intelligence and Knowledge Representation. (Understand)

			CO2	Apply Propositional Logic for knowledge representation. (Apply)
	IT34	Knowledge Representation & Artificial Intelligence - ML, DL	CO3	Design various models based on Machine Learning methodology (Apply)
			CO4	Design various models based on Deep Learning methodology (Apply)
			CO5	Understand various hardware and software aspect used for AI and its application. (Understand)
			CO1	Describe the concepts of Cloud Computing and its Service Models& Deployment Models. (Understand)
			CO2	Classify the types of Virtualization. (Understand)
	IT35	Cloud Computing	CO3	Describe the Cloud Management and relate Cloud to SOA. (Understand)
			CO4	Interpret Architecture and Pharrell Programing of Cloud Computing. (Apply)
			CO5	Demonstrate practical implementation of Cloud computing. (Apply)
	IT31L Pra	Practical	CO1	Develop mobile application. (Apply)
		Practical	CO2	Develop ML, DL models using Python (Apply)
	ITC31	Mini Project	CO1	Create working project using tools and techniques learnt in this semester (Create)



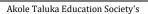
## **TECHNICAL CAMPUS AKOLE**

At./Post. Tal. Akole, Dist. Ahmednagar - 422 601

Tel. 02424 221123/24, Web. www.atestc.edu.in, email- akole2011@gmail.com,

 $Approved \ by \ AICTE, \ New \ Delhi, \ Recognized \ by \ DTE, \ Govt. \ of \ Maharashtra \ and \ Permanently \ Affiliated \ to \ Savitribai \ Phule \ Pune \ University, \ Pune \ Affiliated \ to \ Savitribai \ Phule \ Pune \ University, \ Pune \$ 

YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES
				SEMESTER IV
			CO1	The evolution of technology & timeline (brief history)
			CO2	Introduction to various Devops platforms
	IT-41	DevOps	CO3	Define the building components / blocks of Devops and gain an insight of the Devops Architecture.
			CO4	Gain knowledge about Devops approach across various domains
			CO5	Overview of the technical skill sets for building Devops applications.
SECOND YEAR (SEM- IV,TERM-II)	BM-41	PPM and OB	CO1	Describe and analyze the interactions between multiple aspects of management. (Understand)
			CO2	Analyze the role of planning and decision making in Organization (Analyze)
			CO3	Justify the role of leadership qualities, Motivation and Team Building. (Analyze)
			CO4	Analyze stress management and conflict management (Analyze)
			CO5	Describe Personality and Individual Behavior (Understand)
	ITC41	Project	C01	Create working project using tools and techniques learnt in the programme (Create)





At./Post. Tal. Akole, Dist. Ahmednagar - 422 601

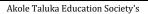
Tel. 02424 221123/24, Web. www.atestc.edu.in, email- akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES				
	SEMESTER I							
			CO101.1	DESCRIBE the basic concepts related to Accounting, Financial Statements, Cost Accounting, Marginal Costing, Budgetary Control and Standard Costing				
			CO101.2	EXPLAIN in detail, all the theoretical concepts taught through the syllabus.				
	101	Managerial Accounting	CO101.3	PERFORM all the necessary calculations through the relevant numerical problems				
			CO101.4	ANALYSE the situation and decide the key financial as well as non-financial elements involved in the situation.				
			CO101.5	EVALUATE the financial impact of the decision.				
		Organizational Behaviors	CO102.1	Describe the major theories, concepts, terms, models, frameworks and research findings in the field of organizational behavior.				
			CO102.2	Explain the implications of organizational behavior from the perspectives of employees, managers, leaders and the organization.				
	102		CO102.3	Make use of the Theories, Models, Principles and Frameworks of organizational behavior in specific organizational settings.				
	102		CO102.4	DECONSTRUCT the role of individual, groups, managers and leaders in influencing how people behave and in influencing organizational culture at large.				
			CO102.5	FORMULATE approaches to reorient individual, team, managerial and leadership behaviour inorder to achieve organizational goals.				
			CO102.6	ELABORATE UPON the challenges in shaping organizational behavior, organizational culture and organizational change.				

			CO103.1	DEFINE the key terms in micro-economics.
			CO103.2	EXPLAIN the key terms in micro-economics, from a managerial perspective.
	103	Economic Analysis for Business	CO103.3	IDENTIFY the various issues in an economics context and DEMONSTRATE their significance from the perspective of business decision making.
	103	Decisions	CO103.4	EXAMINE the inter-relationships between various facets of micro-economics from the perspective of a consumer, firm, industry, market, competition and business cycles.
			CO103.5	DEVELOP critical thinking based on principles of micro-economics for informed business decision making.
			CO103.6	ANTICIPATE how other firms in an industry and consumers will respond to economic decisions made by a business, and how to incorporate these responses into their own decisions.
FIRST YEAR (SEM- I,TERM-I)	104	Business Research Methods	CO104.1	Define various concepts & terms associated with scientific business research.
			CO104.2	Explain the terms and concepts used in all aspects of scientific business research.
			CO104.3	Make use of scientific principles of research to SOLVE contemporary business research problems.
			CO104.4	Examine the various facets of a research problem and ILLUSTRATE the relevant aspects of the research process from a data driven decision perspective.
			CO104.5	JUDGE the suitability of alternative research designs, sampling designs, data collection instruments and data analysis options in the context of a given real-life business research problem from a data driven decision perspective.
			CO104.6	FORMULATE alternative research designs, sampling designs, data collection instruments, testable hypotheses, data analysis strategies and research reports to address real-life business research problems.
			CO105.1	RECALL and REPRODUCE the various concepts, principles, frameworks and terms related to the function and role of marketing.
			CO105.2	DEMONSTRATE the relevance of marketing management concepts and frameworks to a new or existing business across wide variety of sectors and ILLUSTRATE the role that marketing plays in the 'tool kit' of every organizational leader and manager.

	105	Basics of Marketing	CO105.3	APPLY marketing principles and theories to the demands of marketing function and practice in contemporary real world scenarios.
			CO105.4	EXAMINE and LIST marketing issues pertaining to segmentation, targeting and positioning, marketing environmental forces, consumer buying behavior, marketing mix and Product Life Cycle in the context of real world marketing offering (commodities, goods, services, e-products/ e-services).
			CO105.5	EXPLAIN the interrelationships between segmentation, targeting and positioning, marketing environment, consumer buying behavior, marketing mix and Product Life Cycle with real world examples.
			CO105.6	DISCUSS alternative approaches to segmentation, targeting and positioning, the marketing environment, consumer buying behavior, marketing mix and Product Life Cycle in the context of real world marketing offering (commodities, goods, services, e-products/ e-services.).
		Digital Business	CO106.1	DESCRIBE the conceptual framework of e commerce, mobile commerce and social commerce.
			CO106.2	SUMMARIZE the impact of information, mobile, social, digital, IOT and related technologies on society, markets & commerce.
	106		CO106.3	ILLUSTRATE value creation & competitive advantage in a digital Business environment.
	106		CO106.4	EXAMINE the changing role of intermediaries, changing nature of supply chain and payment systems in the online and offline world.
			CO106.5	ELABORATE upon the various types of digital business models and OUTLINE their benefits and limitations.
			CO106.6	DISCUSS the various applications of Digital Business in the present day world.





At./Post. Tal. Akole, Dist. Ahmednagar - 422 601

Tel. 02424 221123/24, Web. www.atestc.edu.in, email-akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES
				SEMESTER II
			CO201.1	Describe the key terms associated with the 4 Ps of marketing.
			CO201.2	Compare and Contrast various approaches to pricing for a real world marketing offering (commodities, goods, services, e-products/ e-services.)
	201	Marketing	CO201.3	Demonstrate an understanding of various channel options for a real world marketing offering (commodities, goods, services, e-products/ e-services.)
	201	management	CO201.4	Examine the product line of a real world marketing offering (commodities, goods, services, e-products/ e-services.)
			CO201.5	EXPLAIN the role of various communication mix elements for a real world marketing offering (commodities, goods, services, e-products/ e-services.)
			CO201.6	DESIGN a marketing plan for a real world marketing offering (commodities, goods, services, e-products/ e-services.)
		Financial Management	CO202.1	Describe the basic concepts related to Financial Management
	202		CO202.2	Explain in detail all theoretical concepts throughout the syllabus
			CO202.3	Perform all the required calculations through relevant numerical problems.
			CO202.4	EVALUATE impact of business decisions on Financial Statements, Working Capital, Capital Structure and Capital Budgeting of the firm
			CO202.5	EVALUATE impact of business decisions on Financial Statements, Working Capital, Capital Structure and Capital Budgeting of the firm

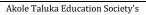
•				
			CO202.6	ANALYZE the situation and comment on financial position of the firm
			CO203.1	Describe the role of Human Resource Function in an Organization.
			CO203.2	Enumerate the emerging trends and practices in HRM.
	202	Human Resource	CO203.3	Illustrate the different methods of HR Acquisition and retention.
	203	Management	CO203.4	Demonstrate the use of different appraisal and training methods in an Organization.
			CO203.5	OUTLINE the compensation strategies of an organization
			CO203.6	INTERPRET the sample job descriptions and job specifications for contemporary entry level roles in real world organizations.
	204	Operations & Supply Chain Management	CO204.1	Define basic terms and concepts related to Production, Operations, Services, Supply Chain and Quality Management.
			CO204.2	Explain the process characteristics and their linkages with process-product matrix in a real world context.
			CO204.3	Describe the various dimensions of production planning and control and their inter-linkages with forecasting.
			CO204.4	CALCULATE inventory levels and order quantities and MAKE USE OF various inventory classification methods.
			CO204.5	OUTLINE a typical Supply Chain Model for a product / service and ILLUSTRATE the linkages with Customer Issues, Logistic and Business Issues in a real world context.
			CO204.6	ELABORATE upon different operational issues in manufacturing and services organisations where the decision-making element is emphasized.
			CO205.1	IDENTIFY and DESCRIBE the key steps involved in the marketing research process.
			CO205.2	COMPARE and CONTRAST various research designs, data sources, data collection instruments, sampling methods and analytical tools and SUMMARIZE their strengths & weaknesses.

		CO205.3	DEMONSTRATE an understanding of the ethical framework that market research needs to operate withi
205MKT	Marketing Research	CO205.4	ANALYSE quantitative data and draw appropriate Inferences to address a real life marketing issue
		CO205.5	DESIGN a market research proposal for a real life marketing research problem and EVALUATE a market proposal
		CO205.6	PLAN and UNDERTAKE qualitative or quantitative Market Research and demonstrate the ability to approanalyse data to resolve a real life marketing issue.
		CO206.1	ENUMERATE social and psychological factors and their influence his/her behavior as a consumer.
		C0206.2	EXPLAIN fundamental concepts associated with consumer and organizational buying behavior.
206MKT	Consumer Behavior	CO206.3	APPLY consumer behavior concepts to real world strategic marketing management decision making.
		CO206.4	ANALYSE the dynamics of human behavior and the basic factors that influence the consumer's decision
		CO206.5	EXPLAIN the consumer and organizational buying behavior process for a variety of products (goods/ser
		CO205.1	RECALL the structure and components of Indian financial system through banking operations & Financial
		CO205.2	UNDERSTAND the concepts of financial markets, their working and importance.
205FIN	Financial Markets	CO205.3	ILLUSTRATE the working and contribution of Banks and NBFCs to the Indian Economy.
ZUSFIIN	and Banking Operations	CO205.4	ANALYZE the linkages in the Financial Markets.
		CO205.5	EXPLAIN the various banking and accounting transactions.
		CO205.6	DEVELOP necessary competencies expected of a finance professional

FIRST YEAR (SEM- II,TERM-II)			CO206.1	UNDERSTAND the need and aspects of personal financial planning
	706FIN		CO206.2	Describe the investment options available to an individual
		Personal Financial	CO206.3	IDENTIFY types of risk and means of managing it
		Planning	CO206.4	DETERMINE the ways of personal tax planning
			CO206.5	EXPLAIN retirement and estate planning for an individual and design a financial plan.
			CO206.6	CREATE a financial plan for a variety of individuals.
			CO205.1	DEFINE the key terms related to performance management and competency development.
	205HRM		CO205.2	EXPLAIN various models of competency development.
		Competency Based Human Resource	CO205.3	PRACTICE competency mapping.
		Management System	CO205.4	ANALYSE competencies required for present and potential future job roles at various levels and across variety of organizations.
			CO205.5	DESIGN and MAP their own competency and plan better and appropriate career for themselves.
			CO205.6	DEVELOP a customized competency model in accordance with the corporate requirements.
			CO206.1	SHOW awareness of important and critical issues in Employee Relations .
			CO206.2	INTERPRET and relate legislations governing employee relations.
	206НРМ	Employee Relations	CO206.3	DEMONSTRATE an understanding of legislations relating to working environment.

200111/191	Legislations.	CO206.4	OUTLINE the role of government, society and trade union in ER.
		CO206.5	EXPLAIN aspects of collective bargaining and grievance handling.
		CO206.6	DISCUSS the relevant provisions of various Labour Legislations.
		CO205.1	DESCRIBE the nature and CHARACTERISTICS of services and the services economy.
		CO205.2	DESRCIBE the service design elements of variety of services.
205 000	Service Operations	CO205.3	USE service blueprinting for mapping variety of real life service processes.
205 OSCN	Management	CO205.4	ANALYSE alternative locations and sites for variety of service facilities.
		CO205.5	JUDGE and EXPLAIN the service orientation at variety of service facilities / organizations.
		CO205.6	CREATE flow process layouts for variety of services.
		CO206.1	DESCRIBE the key concepts of Supply Chain Management and the – driving forces in contemporary Supply Management.
		CO206.2	EXPLAIN the structure of modern day supply chains.
207.050	Supply Chain	CO206.3	IDENTIFY the various flows in real world supply chains.
206 OSCN	Management	CO206.4	COMPARE and CONTRAST push and pull strategies in Supply Chain Management.
		CO206.5	EXPLAIN the key Operational Aspects in Supply Chain Management.
		CO206.6	DISCUSS the relationship between Customer Value and Supply Chain Management.

			CO205.1	IDENTIFY opportunities for creating value using business analytics and DESCRIBE the basic concepts in Business Analytics, DATA Science and Business Intelligence.
			CO205.2	EXPLAIN the applications of Business Analytics in multiple business domains and scenarios.
	205BA	Basic Business	CO205.3	DEVELOP a thought process to think like a data scientist/business analyst.
	ZUSBA	Analytics using R	CO205.4	ANALYZE data graphically by creating a variety of plots using the appropriate visualization tools of R.
			CO205.5	SELECT the right functions of R for the given analytics task.
			CO205.6	COMBINE various tools and functions of R programming language and use them in live analytical projects in multiple business domains and scenarios.
			CO206.1	DEFINE the key terms associated with Data Mining
	206BA		CO206.2	EXPLAIN the various aspects of Data
			CO206.3	APPLY classification models
	ZOODA	Data Mining	CO206.4	ANALYSE using clustering models
			CO206.5	SELECT appropriate association analysis and anomaly detection tools.
			CO206.6	COMBINE various data mining tools and use them in live analytical projects in business scenarios





At./Post. Tal. Akole, Dist. Ahmednagar - 422 601

Tel. 02424 221123/ 24, Web. www.atestc.edu.in, email- akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

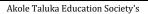
YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES
			SEMESTER III	
			CO301.1	Describe the basic terms and concepts in Strategic Management.
			CO301.2	Explain the various facets of Strategic Management in a real world context
	301	Strategic Management	CO301.3	Describe the trade-offs within and across strategy formulation, implementation, appraisal.
			CO301.4	Integrate the aspects of various functional areas of management to develop a strategic perspective.
			CO301.5	Explain the nature of the problems and challenges confronted by the top management team and the approaches required to function effectively as strategists.
			CO302.1	Describe the concepts and models associated with Decision Science.
		Decision Science	CO302.2	Understand the different decision-making tools required to achieve optimization in business processes.
	202		CO302.3	Apply appropriate decision-making approach and tools to be used in business environment.
	302		CO302.4	Analyses real life situation with constraints and examine the problems using different decision-making tools
			CO302.5	Evaluate the various facets of a business problem and develop problem solving ability
		CO302.6	Discuss & propose the various applications of decision tools in the present business scenario.	

			CO304.1	RECALL the key concepts in services marketing
			CO304.2	EXPLAIN the role of Extended Marketing Mix in Services
	204 MIZT	Coming Made time	CO304.3	DEMONSTRATE the new Paradigm and Perspectives in Marketing of Services
	304 MK1	Services Marketing	CO304.4	ANALYSE the significance of services marketing in the Indian and global economy
			CO304.5	EVALUATE Segmentation, Targeting & Positioning of Services in dynamic marketing environment
			CO304.6	DEVELOP marketing mix for various services offering
		Sales & Distribution Management	CO305.1	DESCRIBE the theoretical concepts related to Sales Management and Distribution Management Domain
			CO305.2	UNDERSTAND the concepts, techniques and approaches required for effective decision making in the areas of Sales and Distribution.
	205 MVT		CO305.3	APPLY the concepts related to sales and distribution management.
	303 MK1		CO305.4	ANALYZE the real life scenarios of sales and distribution management.
			CO305.5	EVALUATE the existing sales and distribution strategies and approaches.
			CO305.6	DEVELOP generate and evaluate sales and distribution strategies.
			CO304.1	DESCRIBE the basic concepts in financing, investing and profit distribution in a firm
			CO304.2	EXPLAIN theoretical concepts related to raising and use of funds and value of firm
	204 FIN	Advanced Financial	CO304.3	CALCULATE values for making capital structure, investment, liquidity and dividend decisions in the financial management of a firm
		304 MKT	305 MKT  Sales & Distribution Management	304 MKT Services Marketing C0304.3  C0304.4  C0304.5  C0304.6  C0305.1  C0305.2  C0305.3  C0305.4  C0305.5  C0305.6  C0304.1  C0304.2  C0304.3

I.	304 LIM	M		1
		Management	CO304.4	ANALYZE the options for making the right financial decisions of a firm
			CO304.5	ASSESS the role of financial planning, risk analysis in investments, liquidity and credit management policy of the firm on shareholder value
			CO304.6	DESIGN an appropriate financial strategy using any one or multiple concepts/ techniques learned in this course.
			CO305.1	Enumerate the key terms associated with International Finance.
			CO305.2	Understanding Summarize the various the concepts related to regulators, financial markets, Financial Instruments, tax structures at international level.
	305 FIN	International	CO305.3	Applying Illustrate the role of international monitory systems & intermediaries in Global financial market.
	305 FIN	Finance	CO305.4	Analyzing Inspect the various parameters of global financial market and interpret best possible international investment opportunities.
			CO305.5	Evaluating Determine the various strategies to start investment or business at the international level by considering various factors of international finance.
SECOND YEAR (SEM-			CO305.6	Creating Formulate the investment plan or business plan by adapting international finance environment.
III,TERM-I)		Strategic Human Resource Management	CO304.1	REMEMBER the strategies adopted by HR and their implementation issues and challenges faced by the organization in national and international context.
			CO304.2	Ability to UNDERSTAND and ARTICULATE the basic concepts of SHRM and link the HR strategies to the organizational business strategies.
	304HRM		CO304.3	ANALYZING Ability to ANALYZE HR as an investment to the company.
			CO304.4	Ability to INTERPRET and EVALUATE the implementation of the HR strategies.
			CO304.5	FORMULATE and provide realistic solutions to the industry by designing innovative strategies and logical decision making.
			C0305.1	DESCRIBE structure of personnel department, its policies and maintenance of employee files & records

	CO305.3 D 305HRM HR Operations		LEARN drafting of communications for disciplinary actions
205HDM			DEMONSTRATE the knowledge and calculations of bonus, gratuity, PF, ESI etc.
зизпкм			EXPERIMEMT to calculate the computation of Workmen compensation, Bonus and Gratuity as per relevant acts
		CO305.5	CALCULATE computation of Workmen compensation, Bonus and Gratuity
		CO305.6	FILE returns under various labour laws and prepare salary structure
		CO304.1	DEFINE the key concepts in Services Operations Management.
		CO304.2	DIFFERENRTIATE between various service strategies, service quality dimensions, and customer relationships based on life time value.
204 OCCM	Services Operations Management C0304.3 C0304.4	CO304.3	IDENTIFY the sources of value in a service supply relationship & three factors that drive profitability for a professional service firm
304 OSCM		CO304.4	CATEGORIZE a service firm according to its stage of competitiveness
		CO304.5	MODIFY the Service strategies of an organization for achieving the strategic service vision.
		CO304.6	SOLVE the relevant numerical in the scope of the subject.
		CO305.1	DEFINE basic terms and concepts related to Logistics management.
	CO305.2		EXPLAIN the infrastructure of logistics, its linkage with various types of communication modes.
20F 000M	Logistics	CO305.3	DESCRIBE the various dimensions of logistics management and transport, their inter-linkages with different types of freights.
305 OSCM	Management	CO305.4	CALCULATE logistic costs and various classification methods of reducing the cost. Involving the information technology and its impacts.

		CO305.5	OUTLINE a typical logistic framework and services. ILLUSTRATE the linkages with its dynamic storage system / Customer Issues, Logistic and Business Issues in a real world context.
		CO305.6	DISCUSS modern real world logistical systems using the various concepts in the syllabus.
		CO304.1	RECALL all basic statistical concepts and associated values, formulae.
		CO304.2	EXPLAIN the statistical tools and DESCRIBE their applications in multiple business domains and scenarios
304 BA	Advanced Statistical	CO304.3	APPLY time series analysis in prediction of various trends.
304 BA	Methods using R	CO304.4	DISCRIMINATE between various types of probability and probability distributions.
		CO304.5	FORMULATE and TEST hypothesis using tools of R.
		CO304.6	COMBINE various tools and functions of R programming language and use them in live analytical projects in multiple business domains and scenarios.
	Machine Learning & Cognitive intelligence using Python	CO305.1	DEFINE the key terms in Python, Machine Learning and Cognitive Intelligence
		CO305.2	EXPLAIN the applications of Machine Learning in multiple business domains and scenarios
305 BA		CO305.3	DEVELOP a thought process to think like data scientist/business Analyst
JUJ BA		CO305.4	ANALYSE data using supervised and unsupervised Learning Techniques
		CO305.5	SELECT the right functions, arrays of Python for Machine Learning algorithms.
		CO305.6	COMBINE various tools and functions of Python language in developing Machine Learning algorithms and use them in live analytical projects in multiple business domain and scenarios.





At./Post. Tal. Akole, Dist. Ahmednagar - 422 601

Tel. 02424 221123/24, Web. www.atestc.edu.in, email-akole2011@gmail.com,

Approved by AICTE, New Delhi, Recognized by DTE, Govt. of Maharashtra and Permanently Affiliated to Savitribai Phule Pune University, Pune

YEAR	COURSE CODE	COURSE NAME	COURSE OUTCOME NO.	COURSE OUTCOMES
				SEMESTER IV
			CO401.1	Enumerate the different parameters & facets of management control of an enterprise.
			CO401.2	Illustrate the various techniques of enterprise performance management for varied sectors.
	401	Enterprise Performance Management	CO401.3	Determine the applicability of various tools and metrics as a performance evaluation & management tools.
			CO401.4	Analyse the key financial & non-financial attributes to evaluate enterprise performance.
			CO401.5	Formulate the various parameters to evaluate enterprise performance effectively through implementation of strategy.
		Indian Ethos &	CO402.1	Describe major theories, concepts, terms, models and framework of Indian ethos and business ethics. Discover the contemporary Issues in Business Ethics
			CO402.2	Classily and Recognize Karma, Karma Yoga and discover its relevance in business setting, Illustrate the business ethical decision rationale derived from Indian Heritage Scriptures.
	403		CO402.3	Apply Principles, Theories, Models and Framework of Indian ethos and business ethics in order to incorporate value system in work culture and work place
	402	Business Ethics	CO402.4	Develop and Exhibit analytical, problem solving skills, and work ethos by Comprehension and Practice of Indian ethos and value system
			CO402.5	Implement, Evaluate, and Facilitate ethical business behavior and promote sustainable business ecology, improve profitability, foster business relation and employee productivity.
		CO402.6	Elaborate Ethical dilemmas in different business areas of marketing, HRM and Finance and Adapt dilemma resolution interventions by referring to certain norms, theories and models of Eastern Management.	

			CO403.1	DESCRIBE the various concepts associated with Marketing 4.0
			CO403.2	EXPLAIN the importance of 5A's in Marketing 4.0.
	AOOMYT	M 1 (1 40	CO403.3	DEMONSTRATE the application of concepts of digital marketing, new productivity metrics, Human centric marketing, Omni channel marketing to the real world of digital economy
	403MKT	Marketing 4.0	CO403.4	DISTINGUISH between traditional and digital marketing practices in given real world context to be the effective marketers.
			CO403.5	ASSESS how Technology & connectivity has changed human life and business in the context of real-world commodities, products & services.
			CO403.6	DEVELOP strategies to create WOW! Moments with customer engagement
		Marketing Strategy	CO404.1	DISCOVER perspectives of market strategy.
			CO404.2	UNDERSTAND the intricacies of competitive marketing situations and ways to handle each situation.
	10.41477		CO404.3	BUILD a market strategy through integrating concepts like product life cycle, adoption, and segmentation, branding, pricing, distribution, and market communication.
	404MKT		CO404.4	ANALYSE a company's current situation through applying internal and external analyses.
			CO404.5	EXPLAIN alternative ways to measure the outcome of market strategies.
			CO404.6	CREATE Corporate Advantage by exploring how the scope of firms is influenced by resources that are shared across products.
			CO403.1	Define and Describe the basic concepts related to Financial Laws
			CO403.2	Understanding Illustrate the implications of various laws, Explain concepts and details of various financial laws.
	403 FIN	Financial Laws	CO403.3	Applying Make use of contextual financial laws applicable to organisations.

Payment Banks, Start-Ups,
volved in the situation.
l of Organizational
osis & Development in
the role of consultant in
t HR Trends.
osis & Deve

	404 HRM	Current Trends & Cases in Human Resource Management	CO404.3	ILLUSTRATE value creation & competitive advantage of Technology on current HR Trends	
	704 IIKW		CO404.4	EXAMINE the changing role of HR Priorities	
			CO404.5	ELABORATE upon the various types of current HR Trends	
			CO404.6	6. APPLY the existing Tech tools to real time HRM Challenges and offer Solutions.	
			CO403.1	DESCRIBE the structure of modern days Logistics.	
			CO403.2	EXPLAIN the key concepts of Supply Chain Management and the – driving forces in contemporary Supply Chain Management.	
	403 OSCM	E Supply Chains and Logistics	CO403.3	IDENTIFY the various flows in real world supply chains and Logistics. IDSCRIBE the importance of documentations.	
	403 OSCM		CO403.4	COMPARE and CONTRAST push and pull strategies in Supply Chain Management. ANALYSE the impact of tracking system linkage in Logistics.	
			CO403.5	EXPLAIN the key Operational Aspects of E Procurement.	
			CO403.6	DEVELOP a framework for e-logistics	
		Industry 4.0	CO404.1	DEFINE industrial revolutions and its different aspects.	
4			CO404.2	EXPLAIN the role of technology pillars of Industry 4.0.	
	404 OSCM		CO404.3	DEMONSTRATE the use of data in effective decision making.	
	707 O3CM		CO404.4	ILLUSTRATE the need of cyber physical system for sustainable competitive advantage.	
			CO404.5	EXPLAIN the challenges faced by various industries in full fledge implementation of Industry 4.0	

			CO404.6	DEVELOP a framework for any organization using base of Smart Industry Readiness Index Proposed by Sing EDB
	403 BA	Economics of Network Industries	CO403.1	APPRECIATE the differences in the nature of information goods as opposed to traditional goods and service
			CO403.2	DESCRIBE the characteristics of the markets for network products.
			CO403.3	ILLUSRTRATE the characteristics of the cost structure of information goods and its implications for pricing information goods w.r.t. price discrimination, versioning of information goods, and bundling
			CO403.4	COMPARE and CONTRAST the pros and cons of keeping products compatible, and strategic aspects of the d regarding compatibility.
			CO403.5	EVALUATE the role of complementary products, compatibility and standards, switching costs and lock-in in network industries.
			CO403.6	DISCUSS the economics of Internet advertising, and the business model of zero pricing.
	404 BA	Artificial Intelligence in Business Applications	CO404.1	IDENTIFY KNOWLEDGE associated and represent it by logical sequence and plan a strategy to solve given p
			CO404.2	UNDERSTAND AI's fundamental concepts and methods.
			CO404.3	APPLY various machine learning algorithms on structured data to develop machine learning models.
			CO404.4	ACQUIRE advanced Data ANALYSIS SKILLS through algorithm and search processes.
			CO404.5	SELECT logical and functional process to develop the model
			CO404.6	CREATE SOLUTIONS for various business problems using AI techniques.