

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/036B Revision: 00	DoI: 01/02/2025	
Internal Correspondence For Department			

Department: AI & DS

CO-PO Mapping

Third Year [2019 Pattern] Sem-1

Savitribai Phule Pune University Bachelor of Artificial Intelligence and Data Science		
Program Outcomes (POs)		
Learners are expected to know and be able to–		
PO1	Engineering knowledge	Apply the knowledge of mathematics, science, Engineering fundamentals, and an Engineering specialization to the solution of complex Engineering problems.
PO2	Problem analysis	Identify, formulate, review research literature and analyze complex Engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and Engineering sciences.
PO3	Design / Development of Solutions	Design solutions for complex Engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and Environmental considerations.
PO4	Conduct Investigations of Complex Problems	Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
PO5	Modern Tool Usage	Create, select, and apply appropriate techniques, resources, and modern Engineering and IT tools including prediction and modeling to complex Engineering activities with an understanding of the limitations.
PO6	The Engineer and Society	Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practices.
PO7	Environment and Sustainability	Understand the impact of the professional Engineering solutions in societal and Environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
PO8	Ethics	Apply ethical principles and commit to professional ethics and responsibilities and norms of Engineering practice.
PO9	Individual and Team Work	Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
PO10	Communication Skills	Communicate effectively on complex Engineering activities with the Engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
PO11	Project Management and Finance	Demonstrate knowledge and understanding of Engineering 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.
PO12	Life-long Learning	Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering &
Research

Record No.: ADM/D/036B
Revision: 00

DoI: 01/02/2025



Internal Correspondence For Department

2) Computer Networks (317521):

On completion of the course, learner will be able to

CO1: Summarize fundamental concepts of Computer Networks, architectures, protocols and technologies.

CO2: Analyze the working of physical layer protocols.

CO3: Analyze the working of different routing protocols and mechanisms.

CO4: Implement client-server applications using sockets.

CO5: Illustrate role of application layer with its protocols, client-server architectures.

CO6: Summarize concepts of MAC and Ethernet.

@ The CO-PO Mapping Table

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO12
CO1	1	1		2	1	1	-	-	2	2	-	1
CO2	1	1	-	1	1	1	-	-	2	2	-	1
CO3	2	3		2	1	1	-	-	2	2	-	1
CO4	1	1	1	-	1	-	-	-	1	-	1	1
CO5	1	3		-	1	-	1	1	-	-	-	-
CO6	1	1		2	1	1	-	-	2	2	-	1



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering &
Research

Record No.: ADM/D/036B
Revision: 00

DoI: 01/02/2025



Internal Correspondence For Department

4) Artificial Intelligence(310253):

CO1: Identify and apply suitable Intelligent agents for various AI applications

CO2: Build smart system using different informed search / uninformed search or heuristic approaches.

CO3: Identify knowledge associated and represent it by ontological engineering to plan a strategy to solve given problem.

CO4: Apply the suitable algorithms to solve AI problems

CO5: Implement ideas underlying modern logical inference systems

CO6: Represent complex problems with expressive yet carefully constrained language of representation.

@ The CO-PO Mapping Matrix

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2	2	1	-	-	1	3	-	2		
CO2	1	3	3	2	3	1	-	3	1	2		
CO3	3	2	2	2	1	1	1	-	-	2		
CO4	1	2	2	1	-	-	1	3	1	2	-	-
CO5	1	2	2	1	-	-	1	3	1	2	-	-
CO6	1	2	2	1	-	-	1	3	1	2	-	-

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/036B Revision: 00	DoI: 01/02/2025	
Internal Correspondence For Department			

6) Audit Course (317528(B)): Industrial Safety And Environmental Consciousness:

On completion of the course, learner will be able to:

CO1: Formulate the plan for safety performance

CO2: Formulate the action plan for accidents and hazards

CO3: Follow the safety and security norms in the industry

CO4: Consider critically the environmental issues of
industrialization

@The CO-PO mapping table

PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
1	-	1	-	-	1	-	1	-	-	-	1
1	2	1	2	-	2	-	2	1	-	1	1
1	1	1	2	-	1	-	2	1	-	1	1
1	2		2	-	1	3	1	1	-	1	1



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering &
Research

Record No.: ADM/D/036B
Revision: 00

DoI: 01/02/2025



Internal Correspondence For Department

8) Environmental Studies(317527):

On completion of the course, learner will be able to—

CO1: Aware the importance of environment

CO2: Understand the water pollution

CO3: Know the Air and noise pollution

CO4: Understand the E-waste and green computing

@The CO-PO mapping table

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1							3					
CO2							3	2				
CO3							3	2				
CO4							3	2				



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering &
Research

Record No.: ADM/D/036B
Revision: 00

DoI: 01/02/2025



Internal Correspondence For Department

2) Cyber Security(317530):

On completion of the course, learner will be able to—

CO1: Gauge the security protections and limitations provided by today's technology.

CO2: Identify cyber security threats.

CO3: Analyze threats in order to protect or defend it in cyberspace from cyber-attacks.

CO4: Build appropriate security solutions against cyber-attacks

MOOC Courses: https://onlinecourses.swayam2.ac.in/cec20_csl5/preview

@The CO-PO mapping table

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	2	2	-	-	-	1	-	-	-	-	-	1
CO2	2	2	-	1	-	1	-	-	-	-	-	1
CO3	2	2	-	-	-	1	-	-	-	-	-	1
CO4	2	2	2	2	2	1	-	-	-	-	-	1

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/036B Revision: 00	DoI: 01/02/2025	
Internal Correspondence For Department			

4) Cloud Computing(310254(C)):

On completion of the course, learners should be able to

CO1: Understand the different Cloud Computing environment

CO2: Use appropriate data storage technique on Cloud, based on Cloud application CO3:

Analyze virtualization technology and install virtualization software

CO4: Develop and deploy applications on Cloud CO5: Apply security in cloud applications

CO6: Use advance techniques in Cloud Computing

@ The CO-PO Mapping Matrix												
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	2	1									1
CO2	1	2	1									
CO3	1	2	1	-	2							
CO4	1	2	2	1								1
CO5	1	2	2	2								
CO6	1	2	2	1	1							1



Akhil Bharatiya Maratha Shikshan Parishad's
Anantrao Pawar College of Engineering &
Research

Record No.: ADM/D/036B
Revision: 00

DoI: 01/02/2025



Internal Correspondence For Department

6) Mini Project(317536):

On completion of the course, learner will be able to:

CO1: Identify basic security attacks and services.

CO2: Analyze the vulnerabilities, and design a security solution.

CO3: Implement symmetric and asymmetric key algorithms.

CO4: Demonstrate network security applications, Firewall, IDS.

@The CO-PO mapping table

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
CO1	1	1	-	2								
CO2	1	1	1	1	2	2	-	-	1	-	-	1
CO3	2	2	2	2	2	2	-	-	1	-	-	1
CO4	2	2	2	2	2	2	-	-	1	-	-	1

Mangal V. Wagh
07/04/2026

Prof. Mangal V. Wagh
Dept. NBA Criteria-3 Coordinator

Dr. Jitendra Musale
07/04/2026

Dr. Jitendra Musale
HOD, AI & DS

Principal

Principal
APCOER, Pune