# Kongunadu Arts and Science College (Autonomous) Coimbatore 641029

#### Department of Artificial Intelligence and Machine Learning

#### Minutes of the Board of Studies:

The Board of Studies meeting was held on 17/03/2025 at 12.00 Noon. The Chairman welcomed and outlined the changes to be made in the scheme of curricula for the board approval.

#### Preamble:

The Chairman Dr. L. Kathirvelkumaran proposed various changes and modifications to be made in the syllabi for the students admitted in the academic year 2025 – 2026 and onwards.

As per the suggestions and recommendations given by the various Stakeholders on the above items discussed, the existing Scheme of Curriculum / Scheme of Examination / Syllabi, Panel of experts for question paper setting and Panel of examiners are enclosed herewith as annexure for the implementation from the commencement of the  $\Lambda$ cademic year 2025-2026.

The members unanimously resolved to approved the proposed changes after careful scrutiny. They also resolved to authorize the Chairman of Board of Studies to place the changes/modifications as approved by the BoS before the Standing Committee on Academic affairs and Academic Council.

Item 1: 2025 Full Syllabus

Sem.	Subject code	Title of the paper	Changes made
	25UAI101	Core Paper 1 - C and C++ Programming	5%
I	25UAI1CL	Core Practical 1 - C and C++ Programming Lab	Nil
	25UAI202	Core Paper 2 - Java Programming	10%
П	25UAI2CM	Core Practical 2 - Java Programming Lab	Nil
	25UAI303	Core Paper 3 - Python Programming for Machine Learning	Nil
ш	25UAI3CN	Core Practical 3 - Python Programming for Machine Learning Lab	15%
	25UAI3A3	Allied Paper 3 – Distributed Operating System	100%
	25UGC3S1	Skill Based Subject 1- Cyber Security	Nil

	25UA1404	Core Paper 4 - R Programming	Nil
	25UAI4CO	Core Practical 4 - R Programming Lab	10%
IV	25UAI4A4	Allied Paper 4 – Design and Analysis of Algorithms	100%
	25UAI4S2	Skill Based Subject 2- MongoDB Lab	100%
	25UAI505	Core Paper 5 -Machine Learning Techniques	Nil
	25UAI506	Core Paper 6 - Introduction to Artificial Intelligence	40%
	25UAI5CP	Core Practical 5 - Machine Learning Lab	Nil .
V	25UAI5CQ	Core Practical 6 - Data Analytics and Visualization Lab	100%
	25UAI5E1	Major Elective Paper 1	Nil
	25UAI5XL	EDC – Fundamentals of Internet and Web Design Lab	100%
	25UAI607	Core Paper 7 - Natural Language Processing	Nil
	25UAI608	Core Paper 8 - Block Chain Technology	Nil
-	25UAI609	Core Paper 9 – Generative AI	100%
VI	25UAI6CR	Core Practical 7 -Natural Language Processing Lab	40%
	25UAI6E2	Major Elective Paper 2	Nil
	25UBI6S3	Skill Based Subject 3- Basics of IPR	Nil

	25UA16E1/25UA16E2	Internet of Things	Nil
	25UAI6E1/25UAI6E2	Open Source Systems	Nil
	25UAI6E1/25UAI6E2	Digital Forensics	Nil
	25UAI6E1/25UAI6E2	Foundations of Robotics	Nil
	25UAI6E1/25UAI6E2	Virtual Reality	Nil
	25UAI6E1/25UAI6E2	Artificial Intelligence in Cyber Security	Nil
Major	25UAI6E1/25UAI6E2	Design Thinking	Nil
Elective	25UAI6E1/25UAI6E2	Image and Speech Processing	Nil
	25UAI6E1/25UAI6E2	Database Management System	Nil
	25UAI6E1/25UAI6E2	Data Mining and Warehousing	Nil
	25UAI6E1/25UAI6E2	Big Data Analytics	5%
	25UAI6E1/25UAI6E2	Deep Learning	Nil
	25UAI6E1/25UAI6E2	Artificial Neural Networks and Fuzzy Logic	Nil
	25UAI6E1/25UAI6E2	Data Analytics and Visualization	100%

### Certificate Programme: (Online)

Subject Code	Title of the Paper	Changes Made
25CAI101	Core Paper 1 - Python with Data Science	60%
25CAI102	Core Paper 2 - Artificial Intelligence and	100%
23CA1102	Machine Learning	
25CAI1CL	Core Practical 1 –	
ZSCATICE	Python	60%
	With Data Science Lab	
25CAIICM	Core Practical 2 –	100%
ZSCATTCM	Artificial Intelligence and Machine Learning Lab	100%

Item 2: Changes /Modifications/ Revisions made for 2025 batch.

Sem.	Subject Code	Title of the Paper	Changes Made
i	25UAI101	Core Paper 1 - C and C++ Programming	Topics: File: File operations are added in Unit V
II	25UA1202	Core Paper 2 - Java Programming	Topics: Types of Inheritance, Introduction to threads are added in Unit III.  Topics: Swing: Layouts, event handling(Action, Mouse, Key) are added in Unit IV
III	25UAI303	Core Paper 3 - Python Programming for Machine Learning	24UAI303 Core Paper 3 - Python Programming is renamed as 25UAI303 Core Paper 3 - Python Programming for Machine Learning
III	25UAI3A3	Allied Paper 3: Distributed Operating System	24UAI3A3 Allied Paper 3: Foundations of Robotics shifted to Elective and 25UAI3A3 Allied Paper 3: Distributed Operating System introduced
Ш	25UAI3CN	Core Practical 3 - Python Programming for Machine Learning Lab	24UAI3CN Core Practical 3 - Python Programming Lab renamed as 25UAI3CN Core Practical 3 - Python Programming for Machine Learning Lab Three Programs added:  • Write a python program using basic control structures  • Write a python program using pivot function  • Write a python program using fancy indexing
IV	25UAI4CO	Core Practical 4 - R Programming Lab	Two Programs added  Write a program to visualize the barplot() function  Write a program to manipulate the DataFrame
IV	25UAI4A4	Allied Paper 4 – Design and Analysis of Algorithms	24UAI4A4 Allied Paper 4 - Big Data Analytics shifted to Elective with the following changes. Topics added in Unit IV: MapReduce: Basic concepts. Data Partitioning, 25UAI4A4 Allied Paper 4 - Design and Analysis of Algorithms introduced

IV IV	25UAI6E1/ 25UAI6E2 25UAI5CQ	Skill Based Subject 2 – MongoDB Lab  Elective – Data Analytics and Visualization  Core Practical 6 - Data Analytics and Visualization Lab	Ethical Hacking replaced with 25UAI4S2 Skill Based Subject 2 — MongoDB Lab  24UAI6E1/ 24UAI6E2 Elective — Data Analytics and Visualization syllabus modified based on 25UAI5CQ Core Practical 6 - Data Analytics and Visualization Lab .  24UAI507 - Core Paper 7 — Deep Learning shifted to Elective, 25UAI5CQ Core Practical 6 - Data Analytics and Visualization Lab introduced.  24UAI506 - Core Paper 6 -
V	25UAI506	Core Paper 6 - Introduction to Artificial Intelligence	Introduction to Artificial Intelligence and Machine Learning changed as 25UAI506 Core Paper 6 - Introduction to Artificial Intelligence, (Unit I,II in 24UAI505 are same as UNIT IV, UNIT V in 24UAI506)  New topics added in 25UAI506 Core Paper 6 - Introduction to Artificial Intelligence (UNIT IV, UNIT V)  Unit IV: Planning: Representation of planning — Partial order planning — Planning and acting in real world — Acting under uncertainty — Bayes's rules — Semantics of Belief networks — Inference in Belief networks — Making simple decisions — Making complex decisions*.  Unit V: Learning from observation: Learning decision trees —Ensemble learning — Learning general logical descriptions — Computational learning theory — Neural networks — Applications — Reinforcement learning— Passive reinforcement — Active reinforcement  Communication as action — Types of communicating agents — Parsing — DCG—Semantic interpretation*.

V	25UAI5XL	EDC – Fundamentals of Internet and Web Design Lab	24UAI5XI - Mobile Applications Development removed and 25UAI5XL EDC - Fundamentals of Internet and Web Design Lab introduced
VI	25UAI6CR	Core Paper 7 -Natural Language Processing Lab	Four programs added:  Implementing Information Retrieval.  Implementing Regular Expression.  Implementing Machine Translation.  Simple Demonstration on Named Entity recognition.
VI	25UAI609	Core Paper 9 – Generative AI	24UAI610 Core Paper 10 – Artificial Neural Networks and Fuzzy Logic shifted to Elective and 25UAI610 Core Paper 10 – Generative AI introduced

# Certificate Programme: (Online)

Subject Code	Title of the Paper	Changes Made
25CAI101	Core Paper 1 - Python with Data Science	Topics modified in based on industry needs Unit I: Introduction to NumPy: Arrays, Operations, Indexing Unit II: Exploratory Data Analysis Unit V: Introduction to Model Deployment
25CAI102	Core Paper 2 - Artificial Intelligence and Machine Learning	24CAI102 - CorePaper2-Machine Learning, 24CAI103 - Core Paper 3 - Artificial Intelligence & Knowledge Representation are replaced with 25CAI102 - Core Paper 2 - Artificial Intelligence and Machine Learning

25CAIICL	Core Practical 1 – Python With Data Science Lab	Modified programs as based on industry needs  • Write a Python program to perform sentiment analysis on text data using NLP techniques.  • Write a Python program to build a simple Decision Tree classifier using Scikit-learn.
25CAIICM	Core Practical 2 –	New Lab Course introduced instead of
	Artificial Intelligence and	24CAI103 - Core Paper 3 - Artificial
	Machine Learning Lab	Intelligence & Knowledge
		Representation

Item 3: To suggest the panel of experts for question paper setting and panel of examiners. The members of the Board of studies in Artificial Intelligence and Machine Learning resolved unanimously to authorise the chairperson Dr. L. Kathirvelkumaran to submit the list of examiner panel for Question paper setting, Evaluation and Practical examinations.

**Item 4:** The students should complete any MOOC course available for Online learning platforms like SWAYAM, NPTEL, Coursera, IIT Bombay Spoken Tutorial, e-Pathshala etc., with a minimum of 4 weeks in duration before the completion of the 5<sup>th</sup> semester and the course completion certificate should be submitted through the HoD to the Controller of Examinations. Extra credits will be given to the candidates who have successfully completed.

Note: For 2025 - 2026, one course to be taken from coursera for all the under graduate students during the even semester of the first year.

For 2024 - 2025, one course to be taken from coursera for all the under graduate students during the odd semester of the second year.

For 2023 – 2024, one course to be taken from coursera for all the under graduate students either during odd or even semester of the third year. Appropriate extra credits and certification as applicable shall be awarded to the students who have completed the course.

Item 5: Other academic activities in the department. The Members appreciated the content of the syllabus and choice of the courses that are provided to the students which shall enhance their skills and core domain knowledge. Also the members suggested to include the new edition of books to all the subjects.

## Signature of the Board Members:

S.No	Name	Designation	Signature
1.	Dr. L.Kathirvelkumaran Chairperson	Assistant Professor & Head, Department of AIML, Kongunadu Arts and Science College, Coimbatore - 641029.	D. July June 2
2.	Dr.S. Poongodi University Nominee	Associate Professor Department of Data Science PSGR Krishnammal College for Women, Peelamedu, Coimabatore – 04 Mobile: 88704 59897	8.74
3.	Dr.Prashant R. Nair Subject Expert	Professor and Head IQAC School of Computing Amrita Vishwa Vidyapeetham, Coimbatore Campus, Amritanagar Ettimadai, Coimbatore- 641112 Mobile: 9943984483	ABSENT
4.	Dr. A. Saravanan Subject Expert	Associate Professor Department of Computing, Coimbatore Institute of Technology, Civil Aerodrome Post, Coimbatore, Tamil Nadu, India – 641 014 Mobile: 7904425208	Har
5.	M. Dinesh Paranthagan Industry Personnel /Expert	Founder and CEO Hackup Technology Private Ltd, 14 A, Sivandhapuram, Saravanampatti Post, Coimbatore. Ph: 9626215976	ABSENT
6.	Ms.B. Jayavinuppa Alumni	AMG INSIGHTS INNOVATIONS PVT LTD. 6/82/R, Edayarpalayam Main Road, Pappampatty, Edayarpalayam, Coimbatore, Coimbatore South, Tamil Nadu. Phone: 93604 87579	ABLENT
7.	Dr.G. Dona Rashmi Member	Assistant Professor, Department of Artificial Intelligence and Machine Learning, Kongunadu Arts and Science College, Coimbatore - 641029.	Lamp
8.	Ms.S. Vanjimalar Member	Assistant Professor, Department of Artificial Intelligence and Machine Learning, Kongunadu Arts and Science College,	Sml-P.

9.	Dr.N. Alamelumangai Member	Assistant Professor, Department of Artificial Intelligence and Machine Learning, Kongunadu Arts and Science College, Coimbatore - 641029.	Alleju
10.	Mr.N. Thamaraikannan Member	Assistant Professor, Department of Artificial Intelligence and Machine Learning, Kongunadu Arts and Science College, Coimbatore - 641029.	Spar

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Signature of the Chairman of the Board

Dr.L.KATHIRVELKUMARAN
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Assistant Professor and Head
Dept. of Artificial Intelligence & Machine Learning
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ANNEXURE - I
(Comprehensive Revision of Syllabus - Revised and Unrevised Courses)
(2025 - 2026)

Skill Development	100%	New	EDC – Fundamentals of Internet and Web Design Lab	25UAI5XL		18
Entrepreneurship	NIL	Existing	Major Elective Paper 1	25UAISE1		17
Skill Development	100%	New	Core Practical 6 - Data Analytics and Visualization Lab	25UAI5CQ		16
Skill Development	NIL	Existing	Core Practical 5 - Machine Learning Lab	25UAI5CP		15
Skill Development	40%	Revised	Core Paper 6 - Introduction to Artificial Intelligence	25UAI506	<del>, 1</del>	14
Skill Development	NIL	Existing	Core Paper 5 -Machine Learning Techniques	25UAI505		13
Skill Development / Employability	100%	New	Skill Based Subject 2- MongoDB Lab	25UAI4S2	,	12
Employability	100%	New	Allied Paper 4 - Design and Analysis of Algorithms	25UAI4A4	IV	11
Skill Development	10%	Revised	Core Practical 4 - R Programming Lab	25UAI4CO		10
Skill Development	NIL	Existing	Core Paper 4 - R Programming	25UAI404	•	9
Skill Development	NIL	Existing	Skill Based Subject 1- Cyber Security	25UGC3S1		8
Employability	100%	New	Allied Paper 3 - Distributed Operating System	25UAI3A3		7
Skill Development	15%	Revised	Core Practical 3 - Python Programming for Machine Learning Lab	25UAI3CN	H	6
Skill Development	NIL	Existing	Core Paper 3 - Python Programming for Machine Learning	25UAI303		5
Skill Development	NIL	Existing	Core Practical 2 - Java Programming Lab	25UAI2CM		4
Skill Development	10%	Revised	Core Paper 2 - Java Programming	25UAI202	Ξ,	. ω
Skill Development	NIL	Existing	Core Practical 1 - C and C++ Programming  Lab	25UAIICL		2
Skill Development	5%	Revised	Core Paper 1 - C and C++ Programming	25UAI101	<u> </u>	-
Employablity/ Entrepreneurship/ Skill Development	% of Modification	Existing/Revised	Name of the Course	Course Code	Semester	S.no



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41	40	39	38	37	36	35	34	33	32	31	30	29	28	26	2 2	25	2   2	22 22	3	21	20	19
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25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6E1/ 25UAI6E2	25UAI6EI/ 25UAI6E2	25UAI6E2	/25UAI6E2	25UAI6E2	25UAI6E1/	25UAI6E1/	25UAI6E2	25UBI6S3	25UAI6Z1	25UAI6E2	25UAI6CR	250AI009	25UA1608	351141700	25UAI607
Data Analytics and Visualization	Artificial Neural Networks and Fuzzy Logic	Deep Learning	Big Data Analytics	Data Mining and Warehousing	Database Management System	Image and Speech Processing	Design Thinking	Artificial Intelligence in Cyber Security	Virtual Reality	Foundations of Robotics	Digital Forensics	Open Source Systems		Internet of Things	Skill Based Subject 3- Basics of IPR	Project and Viva Voce***	Major Elective Paper 2	Processing Lab	Core Paper 9 - Generative AI	Core Paper 8 - Block Chain Technology	- Natural Language Processing	Core Paper 7 - National I american Dupages
Revised	Existing	Existing	Revised	Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing	ď	Existing	Existing	Existing	Existing	Existing	Revised	New	Existing	Existing	1 .
100%	NIL	NIL	5%	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL			NIL	NIL	NIL	NIL	40%	100%	NIL	NIL	,
Employability	Employability	Employability	Employability	Employability	Employability	Employability	Employability	Employability	Employability	Employability	Employability	Employability	LinbioJuonity	Employability	Entrepreneurship	Employability/ Entrepreneurship	Employability	Skill Development	Employability	Skill Development	Employability	

of change - change of entire course (5 units) - 100% Change of 1 unit - 20% Small Change - 10% Minor Change - 5%

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(Comprehensive Revision of Syllabus - Revised and Unrevised Courses) ANNEXURE - I (2025 - 2026)

4	3	2	_	S.no
	ODD/EVEN			Semester
25CAI1CM	25CAIICL	25CAI102	25CAI101	Course Code
Core Practical 2 – Artificial Intelligence and Machine Learning Lab	Core Practical 1 – Python With Data Science Lab	Core Paper 2 - Artificial Intelligence and Machine Learning	Core Paper 1 - Python with Data Science	Name of the Course
Revised	Revised	Revised	Revised	Existing/Revised
100%	60%	100%	60%	% of Modification
Skill Development	Skill Development	Skill Development	Skill Development	% of Employablity/ Entrepreneurship/ Skill Development

% of change - change of entire course (5 units) - 100% Change of 1 unit - 20% Small Change - 10% Minor Change - 5%

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