

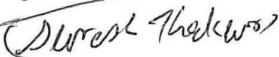
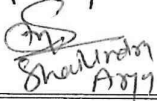

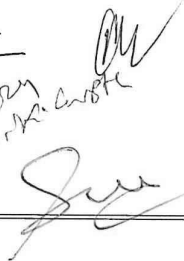



**FOUR YEAR UNDERGRADUATE PROGRAM (2024 – 28)**  
**DEPARTMENT OF COMPUTER SCIENCE**  
**COURSE CURRICULUM**

PART-A: Introduction			
Program: Bachelor in Science (CS) (Certificate / Diploma / Degree/Honors)		Semester – I/III/V	Session: 2024-2025
1	Course Code	CSVAC-01	
2	Course Title	Artificial Intelligence	
3	Course Type	Value Addition Course (VAC)	
4	Prerequisite	As per program	
5	Course Learning Outcomes(CLO)	At the end of this course, students will be able to: <ul style="list-style-type: none"><li>• Understand basics of AI.</li><li>• Understand problem solving techniques of AI.</li><li>• Aware about AI tools.</li><li>• Explore application of AI in various domains.</li><li>• Understand the current scenario of AI in India.</li></ul>	
6	Credit Value	2 Credits	Credit = 15 Hours -Learning & Observation
7	Total Marks	Max. Marks: 50	Min Passing Marks: 20
PART – B: Content of the Course			
Total No. of Teaching– Learning Periods (01 Hr. per period) - 30 Periods (30 Hours)			
Unit	Topics (Course contents)		No .of Period
I	Introduction: Overview of Artificial Intelligence (AI), Foundations of AI, Areas and Applications of AI in various domains, AI in India, Impact and examples of AI, Future of AI.		8
II	Advanced AI: Basic Concept of Machine Learning, Deep Learning, Computer vision, Natural Language Processing (NLP), Speech recognition, Generative AI Applications.		8
III	AI Tools: Conversational AI: ALEXA, CORTANA, SIRI etc., AI tools for content generation, Image creation, Presentation, Video editing etc.		8
IV	Application of AI: Agriculture, Healthcare, Environment, Teaching-Learning, E-Commerce, Industry, Research etc.		6
Keywords	Artificial Intelligence (AI), Machine Learning (ML), Deep Learning, Computer Vision, Natural Language Processing (NLP), Conversational AI, Generative AI.		
Name and Signature of Convener & Members of CBoS:			
<div>Dr H. S. Hota chairman</div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div></div> <div>ANJEETA</div>			
PART-C: Learning Resources			
Text Books, Reference Books and Others			
Text Books Recommended:			
<ul style="list-style-type: none"><li>• Introduction to Artificial Intelligence and Expert Systems, Dan W. Patterson, PHI Publication.</li><li>• Artificial Intelligence, Elaine Rich and Kevin Knight TMH publication.</li></ul>			

**Reference Books Recommended:**

- Artificial Intelligence and machine learning, Vinod Chandra S.S., Anand Hareendrn S., PHI learning private Ltd.
- Foundations of Artificial Intelligence and Expert Systems, Macmillan Series in Computer Science, V.S. Jankiraman, K. Sarukesi and P. Gopala Krishnan.

**Online Resources:**

- Ministry of Electronics and Information Technology Portal for INDIAai:  
<https://indiaai.gov.in/>  
Introduction to Artificial Intelligence from SWAYAM:  
[https://www.youtube.com/watch?v=pKcVMlkFpRc&list=PLwdnzlV3ogoXaccHrrFVZCJkbm\\_laSHcH&index=2](https://www.youtube.com/watch?v=pKcVMlkFpRc&list=PLwdnzlV3ogoXaccHrrFVZCJkbm_laSHcH&index=2)  
An introduction to Artificial Intelligence from SWAYAM:  
[https://onlinecourses.nptel.ac.in/noc24\\_cs08/preview](https://onlinecourses.nptel.ac.in/noc24_cs08/preview)
- Introduction to Artificial Intelligence from Coursera:  
<https://www.coursera.org/learn/introduction-to-ai>
- Introduction to Artificial Intelligence:  
<https://www.javatpoint.com/artificial-intelligence-ai>
- How to Learn Artificial Intelligence from Coursera:  
<https://www.coursera.org/articles/how-to-learn-artificial-intelligence>

**PART-D: Assessment and Evaluation****Suggested Continuous Evaluation Methods:**

Maximum Marks: 50 Marks

Continuous Internal Assessment(CIA): 15 Marks

End Semester Exam(ESE): 35 Marks

<b>Continuous Internal Assessment(CIA):</b> (By Course Teacher)	Internal Test / Quiz-(2): 10 + 10	Better marks out of the two Test / Quiz + obtained marks in Assignment shall be considered against 15 Marks
	Assignment/Seminar- 05 Total Marks - 15	
<b>End Semester Exam (ESE):</b>	Laboratory/Field Skill Performance: On spot Assessment	Managed by Coordinator as per skilling
	A. Performed the task based on learned skill - 20 Marks B. Spotting based on tools (Written) - 10 Marks C. Viva-voce (based on principle/technology)- 05 Marks	

Name and Signature of Convener &amp; Members of CBoS:

Dr. H.S. Hota  
chairman

Sunit

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Suresh (Hota)Shreekrishna  
AnjAn  
Kishore Kumar

Gopal

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ANJEEETA KUTOR