।। न हि ज्ञानेन सदृशं । पवित्रमिह विद्यते ।।

Shriram Shikshan Sanstha's

Shriram Institute of Information Technology, Paniv
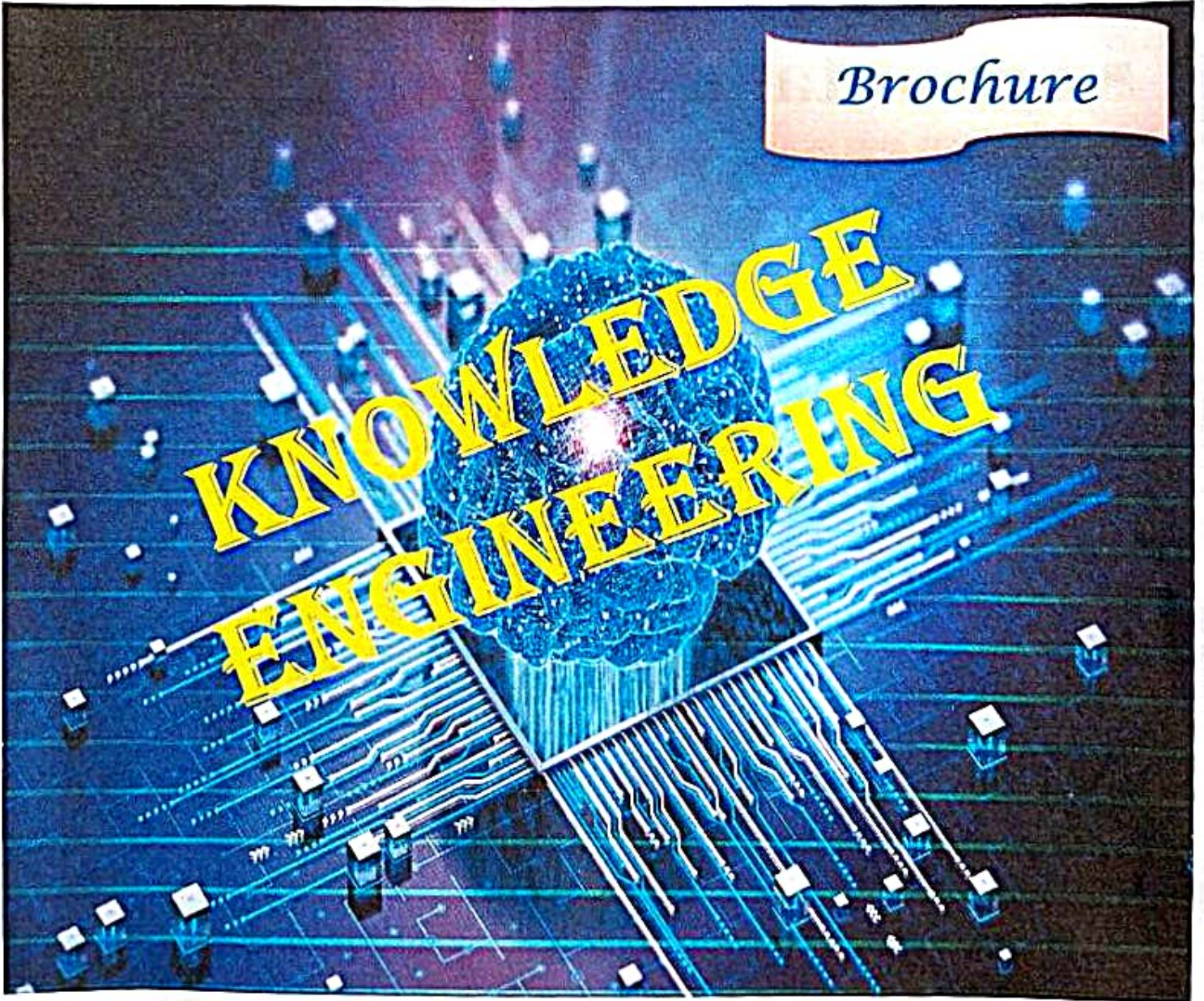
Tal-Malshiras Dist-Solapur [MH],413113

NAAC Accredited with 'B' Grade

Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur

KNOWLEDGE ENGINEERING COURSE

Duration 30 days

Brochure

KNOWLEDGE ENGINEERING

Academic Year: 2023-24

Email-siitpaniv@gmail.com

Website:-www.siitpaniv.org

▪ Aims and Objectives

- Knowledge Engineering Builds Smarter Machines
- Knowledge Engineering Understands the Human Mind
- Knowledge Engineering is Beyond Human Limits
- Knowledge Engineering Unravels Problems
- Knowledge Engineering Achieves Numerous Duties
- Knowledge Engineering Designs for a Boom in Big Data
- Knowledge Engineering Produces Synergy between Humans and AI
- Knowledge Engineering is good at Problem-solving
- Knowledge Engineering Assists with Planning
- Knowledge Engineering Supercharges the Human Brain

▪ Advantages of Course

- This course will provide significantly reduce errors and increase accuracy and precision.
- This course will provide Stay Ahead in the Technology Curve.
- This course will provide how to Solve Complex Problems with Machine Learning.
- This course will provide Personal Development and Continuous Learning
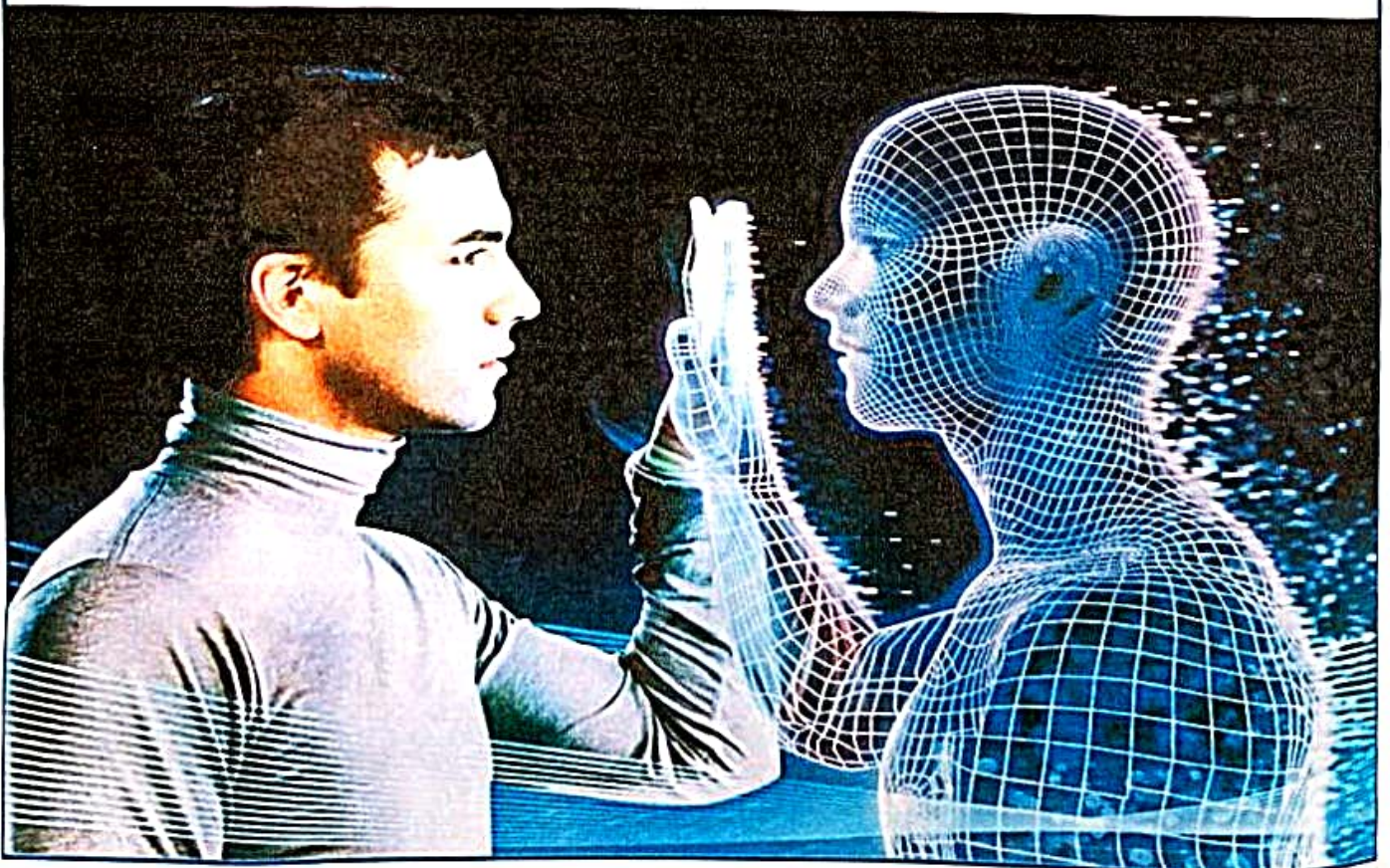
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Shriram Institute of Information Technology, Paniv

Tal. – Malshiras, Dist. – Solapur, [MH] 413113

NAAC Accredited with 'B' Grade

Course Name : Knowledge Engineering

Syllabus 2023-2024

Topic	Articles
1.	**Introduction to AI and ML:** • An overview of AI and ML • History of AI and ML • Applications of AI and ML
2.	**Mathematics for AI and ML:** • Topics such as linear algebra, calculus, and statistics are fundamental for understanding the algorithms and models used in AI and ML. **Programming Fundamentals:** • Proficiency in languages like Python, which is widely used for AI and ML development, is crucial.
3.	**Data Structures and Algorithms:** • Understanding how to efficiently store and process data is essential for AI and ML applications.
4.	**Probability and Statistics:** • Concepts like probability distributions. • statistical tests, and hypothesis testing are key to making informed decisions in AI and ML.

5.	**Machine Learning Basics:** • An introduction to supervised and unsupervised learning, regression, classification, clustering, and evaluation metrics • Understanding the intricacies of the artificial intelligence and machine learning syllabus will help you grasp the comprehensive knowledge needed to excel in these rapidly evolving fields.
6.	**Neural Networks and Deep Learning:** • Exploring the architecture of artificial neural networks and how deep learning techniques have revolutionized AI.
7.	**Natural Language Processing (NLP):** • NLP focuses on the interaction between computers and human language • Covering topics like sentiment analysis, text generation, and language understanding.
8.	**Data Collection and Cleaning:** • Techniques for acquiring and cleaning datasets, which are essential for training and testing AI models.

॥ न हि ज्ञानेन सदृशं । पवित्रमिह विद्यते ॥

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NAAC Accredited with 'B' Grade

Course Name: Knowledge Engineering

Time Table 2023-2024

Day / Time	Month Name	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
4:15 to 5:00PM	July	B.Sc(ECS) - III		B.Sc(ECS) - III	BCA - III		
4:15 to 5:00PM	Aug		BCA - III			BCA - III	B.Sc(ECS) - III

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Course Name: Knowledge Engineering

Teaching Plan 2023-2024

Topic	Month	Articles
1.	July	**Introduction to AI and ML:** • An overview of AI and ML • History of AI and ML • Applications of AI and ML
		Mathematics for AI and ML: • Topics such as linear algebra, calculus, and statistics are fundamental for understanding the algorithms and models used in AI and ML. **Programming Fundamentals:** • Proficiency in languages like Python, which is widely used for AI and ML development, is crucial.
		Data Structures and Algorithms: • Understanding how to efficiently store and process data is essential for AI and ML applications.
		Probability and Statistics: • Concepts like probability distributions. • statistical tests, and hypothesis testing are key to making informed decisions in AI and ML..

2.	Aug		**Machine Learning Basics:** • An introduction to supervised and unsupervised learning, regression, classification, clustering, and evaluation metrics • Understanding the intricacies of the artificial intelligence and machine learning syllabus will help you grasp the comprehensiv knowledge needed to excel in these rapidly evolving fields.
			Neural Networks and Deep Learning: • Exploring the architecture of artificial neural networks and how deep learning techniques have revolutionized AI.
			Natural Language Processing (NLP): • NLP focuses on the interaction between computers and human language • Covering topics like sentiment analysis, text generation, and language understanding.
			Data Collection and Cleaning: • Techniques for acquiring and cleaning datasets, which are essential for training and testing AI models.

Admission Form of Certification Course

Course Name -
☐ English for Personality Development
☐ Knowledge Engineering
☐ Yoga Education
☐ Advanced MS - Office
☐ Python for Data Science

Name of Students - _____

Gender - ☐ Male   ☐ Female

Academic Program - ☐ B.C.A.   ☐ B.Sc.(ECS)   ☐ M.Sc.(Comp. Sci.)

Part - ☐ I   ☐ II   ☐ III

Academic year - _____

Mobile No - _____

Category - SC / OBC / NT / Open / ST

Address - _____
_____
_____

Student Signature

Course Outcomes

- Apply the good programming skills to formulate the solutions for computational problems.
- Design and develop solutions for informed and uninformed search problems in Knowledge Engineering.
- Analyze the graphical outcomes of learning algorithms with specific datasets.
- Identify problems where artificial intelligence techniques are applicable.
- Apply selected basic Knowledge Engineering techniques; judge applicability of more advanced techniques.
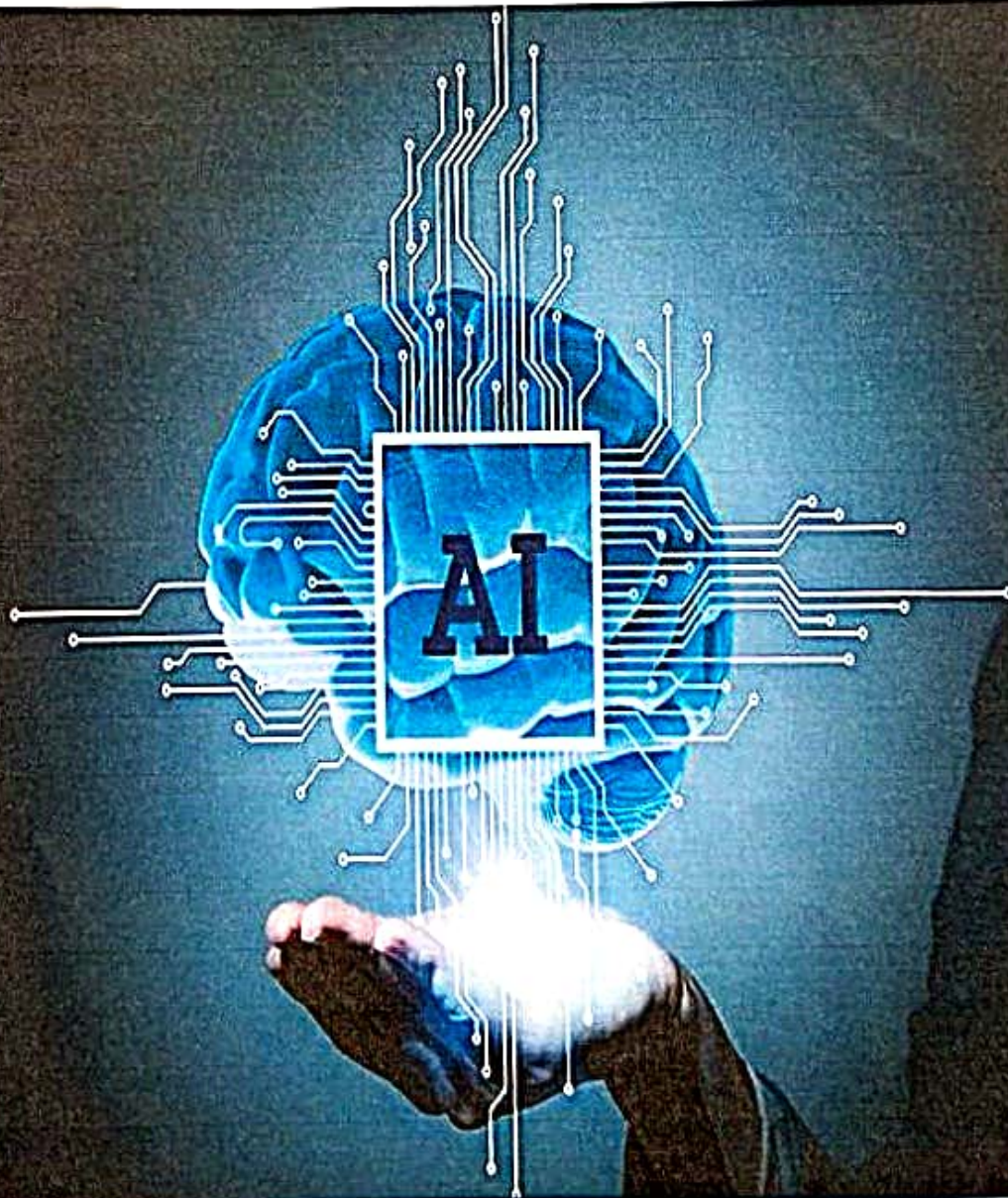
Our Institute Programs

1) Bachelor of Computer Application (B.C.A.)

2) Bachelor of Science (Entire Computer Science)(B.Sc.(ECS))

3) Master of Science(Computer Science) (M.Sc.(Comp.Sci.))

NAAC Co-Ordinator

Asst. Prof. Nale V. D.

Vice - Principal

Asst. Prof. Dawkare R.R.