



R. J. COLLEGE of Arts, Science & Commerce (AUTONOMOUS)

(Hindi Vidya Prachar Samiti's RAMNIRANJAN JHUNJHUNWALA COLLEGE of Arts, Science & Commerce)

Opposite Ghatkopar Railway Station, Ghatkopar (West), Mumbai 400086, Maharashtra, INDIA.

Website: www.rjcollege.edu.in Email: rjcollege@rjcollege.edu.in Tel No: +91 22 25151763 Fax No: +91 22 25150957

College is recognized under Section 2(f) & 12(B) of the UGC Act, 1956

Affiliated to UNIVERSITY OF MUMBAI || NAAC Re-Accredited 'A' Grade (CGPA: 3.50)

Departmental of Information Technology

Date : 05/10/2019

Notice

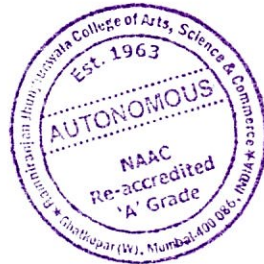
The Department of Information Technology will be organizing the Value Added course on Artificial Intelligence from 11/10/2019 To 03/02/2020 for TY BSc IT students The program will comprise 30 working hours. Interested students should give their names in the department of Information Technology office on or before 08/10/2019 .

In-Charge

Principal

PRINCIPAL

RAMNIRANJAN JHUNJHUNWALA COLLEGE
OF ARTS, SCIENCE & COMMERCE (AUTONOMOUS)
Ghatkopar (W), Mumbai - 400 086, Maharashtra, INDIA



2019: Star College Status by DBT

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BROCHURE



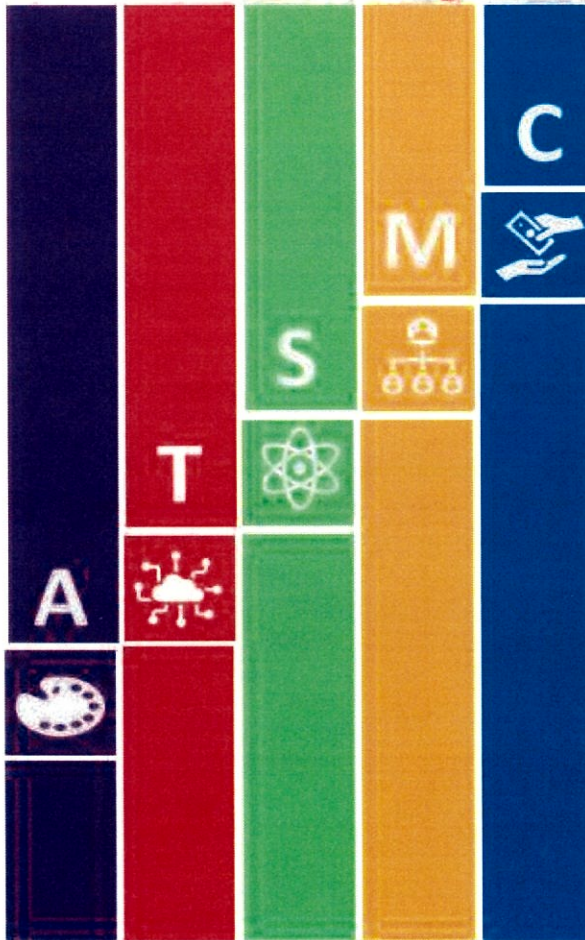
Hindi Vidya Prachar Samiti's

RAMNIRANJAN JHUNJHUNWALA COLLEGE (AUTONOMOUS)

(Also known as R. J. College of Arts, Science & Commerce as per UGC Notification)

Affiliated to UNIVERSITY OF MUMBAI || Recognized by UGC under 2f & 12B
NAAC Accredited 'A GRADE' with CGPA 3.50

Knowledge is all Ambrosia



CERTIFICATE COURSE IN

ARTIFICIAL INTELLIGENCE

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Opposite Railway Station, Ghatkopar (W), Mumbai - 400 086, Maharashtra, INDIA.

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CERTIFICATE COURSE IN ARTIFICIAL INTELLIGENCE

ABOUT US

Hindi Vidya Prachar Samiti was incepted on the auspicious day of Shri Krishna Janmashtami, 15th August 1938. A brain child of a visionary Late Shri Nandkishore Singh Jairamji, samiti was established with the objectives of catering to the educational needs of the Hindi speaking community. Ramniranjan Jhunjunwala College came into existence in 1963, enabling a larger section of the society to take advantage of the facilities provided for higher education.

From 1999-2000 the College has added a number of self-financing courses like B.M.S., B.B.I., B.Sc. in Computer Science, Information Technology, Biotechnology, M.Sc. in Computer Science, Biotechnology and Information Technology as well as add on courses, which further hone the special skills of the students.

The college has been reaccruited with 'A' Grade by NAAC in 2014 with a CGPA 3.50 and received the Best College Award (2007-2008) of the University of Mumbai. The College has been bestowed with IMC "Ramkrishna Bajaj Performance Excellence Trophy", 2010.

The Principal of the college was awarded "Best Teacher" by Government of Maharashtra in 2011.

Government of Maharashtra conferred the college with "JAAGAR JAANIVANCHA" (First in Mumbai Suburban- in 2013 and Second in Mumbai Suburban- in 2014) for safety of girls.

Course Code: **RJITC04**

Duration: **30** hours

Credits: **02**

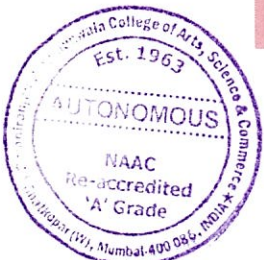
ABOUT COURSE

The course aims to teach the basic concept of Artificial Intelligence. It will facilitate the learner to differentiate between human learning and machine learning. It will give an overview of intelligence systems and different research areas in AI domain. A few applications of AI are elaborately explained in the course.



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CERTIFICATE COURSE IN **ARTIFICIAL INTELLIGENCE**

COURSE OBJECTIVE

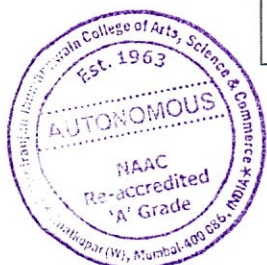
The course is designed to give a complete overview of Artificial Intelligence. After completion of the course learners will be able to orient themselves in any specialized branch of AI.

COURSE CONTENT

- | | |
|-----------------|--|
| Unit I | <p>Overview: What is AI? History of AI, Goals of AI, Components of AI, AI Techniques, AI Applications, research areas, AI classification</p> <p>Intelligence and its types, Learning - difference between human and machine learning</p> <p>Agents and Environments: Introduction to different AI Agents, Terminology, Rationality, Structure of AI agents, Model based agents, goal based agents, Utility based agents, Environment, Turing test</p> |
| Unit II | <p>AI Algorithms : Single Agent Pathfinding problems, Search terminology, Brute Force Search, Depth First, Breadth First, Bidirectional search, Comparison of different test algorithm strategies, Informed Search Strategy, Local Search Algorithm: Hill climbing, local beam search, Simulated Annealing, Travelling Salesman problem</p> |
| Unit III | <p>Neural Networks: Artificial Neural Networks (ANN) and its structure, types of ANN, working, Machine Learning in ANN, Bayesian Networks, Applications of ANN</p> <p>Natural Language Processing: Components of NLP - NLU & NLG, Terminology used in NLP, Steps in NLP, Implementation aspects - Context free grammar, Top down parser</p> |
| Unit IV | <p>Fuzzy Logic: Introduction, FLS Architecture, Example, Application Areas, Advantages and disadvantages</p> <p>Expert Systems: Introduction - characteristics and capabilities, components, Limitations, applications, technology, Development of expert system, benefits</p> <p>Robotics: Introduction, Aspects, difference in Robotic programming and other AI programming, Robot Locomotion, components of Robot, Computer Vision, Tasks of Computer vision, Applications</p> |

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CERTIFICATE COURSE IN ARTIFICIAL INTELLIGENCE

COURSE OUTCOME

- To understand the basic concepts of AI
- Implement AI algorithms
- Understand the AI application in Neural Networks and Natural Language Programming
- Understand AI application in Expert Systems, Fuzzy logic systems and Robotics

MEDIUM OF INSTRUCTION

English

EVALUATION

Evaluation		Maximum Marks
Exercise	Algorithm Implementation Exercise	20
Assignment	Assignments based on Concepts	40
Examination	Subjective Question Answers	40

100 MARKS

PASSING 40

WHO SHOULD DO IT?

The learner should have basic knowledge of computer technology. No specific qualification needed. However understanding of a programming language will be advantageous.



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Department of Information Technology

Artificial Intelligence - Value Added Course

Course Name : Artificial Intelligence

Year of Offering: 2019-20

Duration: (30 Hours) 11/10/2019 To 03/02/2020

Resource Person : Pournima Bhangale

Number of students enrolled : T.Y. BSc.(I.T.) - 30

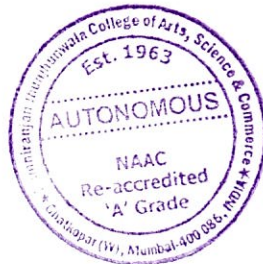
Number of students successfully completed the course - 25

Number of Teachers Involved with their Names: 1. Archana Bhide

Content of session :

The department of Information Technology has conducted two credits value added course on Artificial Intelligence from 11/10/2019 to 03/02/2020 (30 hrs). The course covered topics related to AI and algorithms.


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Principal

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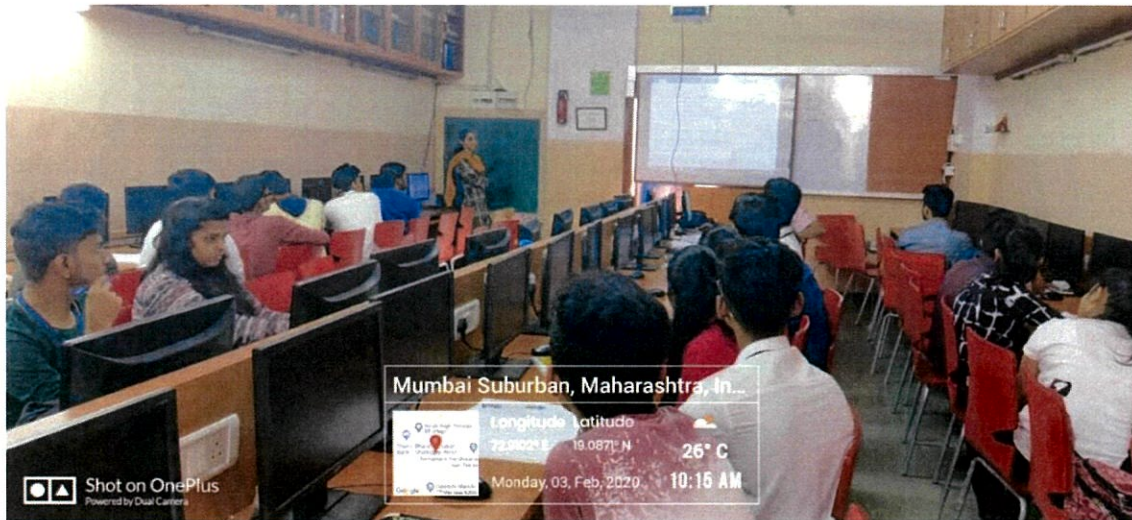
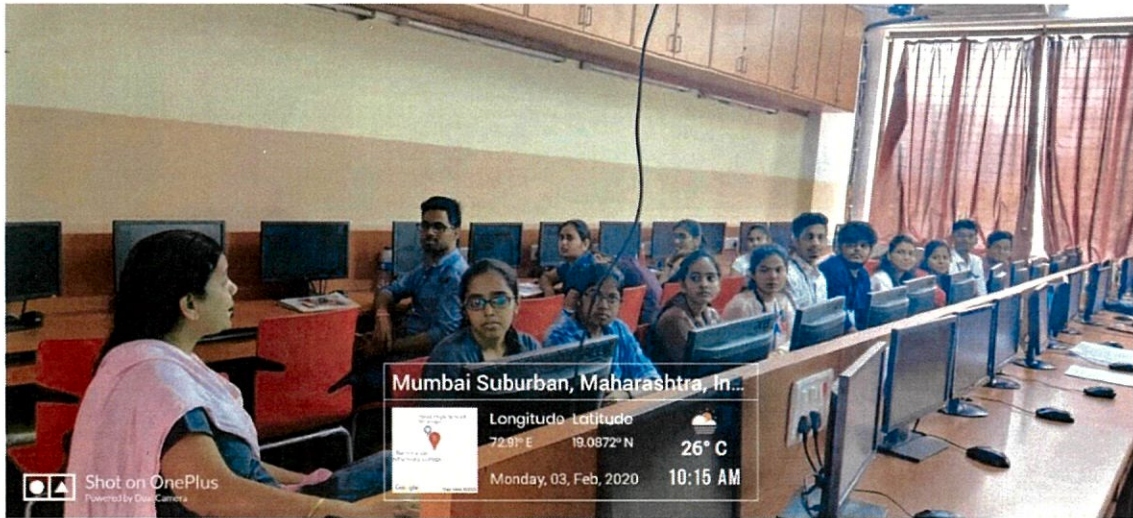
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Photographs of the event Value Added Course on "Artificial Intelligence"




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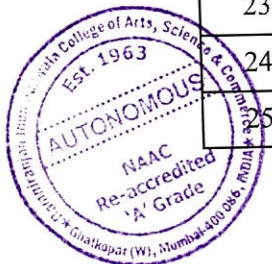
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Department of Information Technology

Value Added Course on Artificial Intelligence

List of students who have completed the course

Sr. No.	RollNo	Name of Student	StuID
1	3	VIKAS PRAKASH BISOI	17181913
2	4	/ANNAPURNA NAROTTAM CHANDELA	17181457
3	6	/JUI SHAHU DALVI	17182245
4	8	VIRAL MAHENDRA DODHIA	17181285
5	9	DEEPAK KUMAR RAMBAHAL GAUTAM	17181999
6	10	SATISHKUMAR JOKHURAM GUPTA	17181900
7	15	ROSHAN RAJENDRA JAISWAR	17182360
8	16	/SADHANA JAYRAM JAWAJI	17181294
9	17	/SUPRIYA SHAHAJI KAPASE	17181154
10	21	/BHAVIKA SUBHASH MAURYA	17181048
11	22	/SUNDARI RAMSURAT MAURYA	17181911
12	23	/PREETI RAKESH MISHRA	17181461
13	24	SHAUNAKJI SATYANAND MISHRA	17181372
14	25	/NEHA VIJAY MORE	17182018
15	27	/RUPALI VILAS PHADATARE	17181459
16	33	SHAIKH AFTAB ASHPAK ABIDA	17184160
17	35	/SIMRAN RAJKUMAR SHARMA	17181086
18	37	AJIT JAYPRAKASH SHUKLA	17181470
19	38	/MANISHA SHIVANAND SINGH	17182390
20	40	SHIVAM RAKESH SINGH	17182294
21	41	SHIVAM ASHISH SINGH	17181896
22	47	/NEHA AJAYPRATAP YADAV	17181522
23	48	/AAKANSHA MADHUSUDAN GOSAVI	17181593
24	53	BADITYA SACHIN BASUDEB ANUSHA	17181443
25	62	SHEKHARKUMAR DAMBRU BHANDI	17181496



Use
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CERTIFICATE

This is to certify that Mr. / Ms. **VIKAS PRAKASH BISOI** of class **TY BSc I.T** has completed a value added course in Artificial Intelligence (RJITC04) of 30 hours conducted by Department of Information Technology from **11/10/2019 to 03/02/2020**. He / She has satisfactorily completed the course with all given assignments / evaluation work.

Handwritten signature

In-charge

Handwritten signature

Principal



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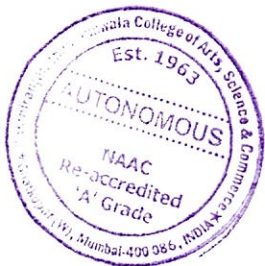
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