



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited "A" Grade by NAAC | 12B Status by UGC | Approved by AICTE

www.sathyabama.ac.in

SCHOOL OF COMPUTING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

1.3.2 VALUE ADDED COURSES [2022-2023]

S. No.	Title	Events Date	Page. No.
1	Insights On Robots	16-02-2023 to 05-04-2023	2
2	Cybug's GO Programming	13-02-2023 to 05-04-2023	9
3	Python Programming	20-02-2023 to 10-04-2023	15
4	Deep Learning	15-02-2023 to 03-04-2023	21
5	Yoga for Life	22-02-2023 to 22-03-2023	27

1. INSIGHTS ON ROBOTS

The Value Added Course in Insight to Robot was organized at School of Computing, Department of Computer Science and Engineering, in Association with Kalam Institute for Technical Education, at Sathyabama Institute of Science and Technology, in Sathyabama Centre for Advanced Studies - from 16th Feb 2023 to 05th April 2023. Around 30 students from various discipline has participated in this VAC program. The students are divided into 5 different teams and based on the problems given; one among the team is selected as best. From the program all the students learned to build the robots using Advanced Robotics Kit based learning.

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SCHOOL OF COMPUTING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
ORGANIZES

INSIGHT TO ROBOTICS

16th Feb to 5th April-2023
3:15 - 4:45 PM
Sathyabama Centre For Advanced Studies

Value added course

CHIEF PATRONS
Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Mr. J. Arul Selvan, Vice President
Ms. Maria Bernadette Tagilarasi, Vice President
Ms. Maria Catherine Jayapriya, Vice President

FACULTY CO-ORDINATORS
Dr. Anbanaji Jeba Selvi, Assoc. Professor, Dept. of ECE
Dr. R. Pandian, Assoc. Professor, Dept of EIE
Dr. G. Rajalakshmi, Asst Professor, Dept of EIE
Dr. Indhu, Asst Professor, Dept of ECE

PATRON
Dr. T. Sasipraba, Vice Chancellor
Dr. E. Logashanmugam, Pro Vice Chancellor
Dr. G. Sundari, Director-Administration

CONVENORS
Dr. T. Sasikala, Dean - School of Computing
Dr. L. Lakshmanan, HOD-CSE
Dr. S. Vigneshwari, HOD-CSE

SCAN ME

Reg link: <https://forms.gle/gv7FrS1JPHmKV8Kg8>

COURSE CONTENT

OBJECTIVES:

- To understand the functions of the basic components of a Robot.
- To study the use of various types of End of Effectors and Sensors
- To impart knowledge in Robot Kinematics and Programming
- To learn Robot safety issues and economics.

INTRODUCTION

6 Hrs.

Definition and scope of Robotics – Historical overview of robotics – Application of Robotics in various fields- Working modules of bots - Co ordinate Systems- Work Envelope Types and Classification- Specifications-Pitch- Yaw, Roll, Joint Notations- Speed of Motion.

ROBOT DRIVE SYSTEMS AND END EFFECTORS

6 Hrs.

Pneumatic Drives-Hydraulic Drives-Mechanical Drives-Electrical Drives-D.C. Servo Motors, Stepper Motors, A.C. Servo Motors-Salient Features, Applications and Comparison of all these Drives, End Effectors-Grippers-Mechanical Grippers, Pneumatic and Hydraulic- Grippers, Magnetic Grippers, Vacuum Grippers; Two Fingered and Three Fingered Grippers; Internal Grippers and External Grippers; Selection and Design Considerations.

SENSORS AND MACHINE VISION

6 Hrs.

Requirements of a sensor, Principles and Applications of the following types of sensors- Position sensors - Piezo Electric Sensor, LVDT, Resolvers, Optical Encoders, pneumatic Position Sensors, Range Sensors Triangulations Principles, Structured, Lighting Approach, Time of Flight, Range Finders, Laser Range Meters, Touch Sensors ,binary Sensors., Analog Sensors, Wrist Sensors, Compliance Sensors, Slip Sensors.

ROBOTS KINEMATICS AND ROBOTS PROGRAMMING

6 Hrs.

Forward Kinematics, Inverse Kinematics and Difference; Forward Kinematics and Reverse Kinematics of manipulators with Two, Three Degrees of Freedom (in 2 Dimension). Lead through Programming, Robot programming Languages-VAL Programming-Motion Commands, Sensor Commands, End Effector commands and simple Programs.

IMPLEMENTATION AND ROBOT ECONOMICS

6 Hrs.

RGV, AGV; Implementation of Robots in Industries-Various Steps; Safety Considerations for Robot Operations - Economic Analysis of Robots.

COURSE OUTCOMES

On Completion of course student will able to

CO1: Understand Fundamental Principles.

CO2: Analyse Robot component and system.

CO3: Apply Kinematics and Dynamic concepts.

CO4: Implement Robot perception Techniques.

CO5: Design robot control systems.

CO6: Develop robot programming skills and robot motion planning.

Date	9.00 am to 10.00 am	10.00 am to 10.15 am	10.15 am to 12.15	12.15 Noon to 1.00 pm	1.00 pm to 04.00 pm
16.02.2023	Introduction	BREAK	Module A topics	LUNCH	Robotics Basics
23.02.2023	Types of Robots		Module A Seminar		Robot Sensing and Perception
09.03.2023	Module B Seminar		Sensing Layout		Robot Control and Actuation
23.03.2023	BrainstormingActivity		Artificial Intelligence and Robotics		Machine Learning in Robotics
05.04.2023	Robot Programming and Software		Ethical and Social Implications		Robot Design and Engineering

Name list of students enrolled in Insights of Robots Value added Course

S. NO.	Register Number	Name	Branch
1	40732004	T. KAMALIKA	BE CSE- IOT
2	40732005	PATHANGE PAVAN KUMAR	BE CSE- IOT
3	40732006	J. RAMASAMY	BE CSE- IOT
4	40732007	S. SAI SIVA SUBRAMANIYEM	BE CSE- IOT
5	40733027	SIRIKONDA VAISHNAVI	BE CSE DATA SCIENCE
6	40733028	SRIVATHSAN. K	BE CSE DATA SCIENCE
7	40733029	SUDHARSANAN. P	BE CSE DATA SCIENCE
8	40733030	SUNKARA VENKATA SRIKAR	BE CSE DATA SCIENCE
9	40733031	VAYIGANDLA DEVARSH	BE CSE DATA SCIENCE
10	40733032	YOGESHWARAN. E	BE CSE DATA SCIENCE
11	40733033	MOHIT TIWARI	BE CSE DATA SCIENCE
12	40733034	NIMMALA HEMA SUNDDAR SAAII SRINIVAS	BE CSE DATA SCIENCE
13	40733701	MADESHWARAN UMASANKAR	BE CSE DATA SCIENCE
14	40733702	ARYAN KUMAR	BE CSE DATA SCIENCE
15	40733703	KOPPURAVURI VENKAT	BE CSE DATA SCIENCE
16	40733704	SRINEKETH RAJAGOPAL	BE CSE DATA SCIENCE
17	40731091	SHEELAM DINESH	BE CSE - AI
18	40731093	SHOUVIN. A	BE CSE - AI

19	40731094	SHYAM ANAND. S	BE CSE - AI
20	40731098	SIVANESHJI. S	BE CSE - AI
21	40731099	SOM MAHANTI SAI VINIT	BE CSE - AI
22	40731100	SONA MOHAMMAD IDREES SHAMSHUDDIN	BE CSE - AI
23	40731102	D. SRINITHI SARASWATHI	BE CSE - AI
24	40731104	SRIRAM. V	BE CSE - AI
25	40731114	THANZIA RAKSHEEN. I	BE CSE - AI
26	40731115	THARUNYA. P	BE CSE - AI
27	40731117	TIRUMALASETTI LAKSHMI SARVANI	BE CSE - AI
28	40731120	V. UMESH CHAND	BE CSE - AI
29	40731123	C. VENKATA NAGA SRIHARSHA	BE CSE - AI
30	40731127	VISHWAJEET ANAND	BE CSE - AI
31	40731128	VUNDAMATLA PRASANTHI	BE CSE - AI
32	40731130	VUYYURU SASI KIRAN REDDY .V	BE CSE - AI
33	40731132	YASHWIN P PRAKASH	BE CSE - AI
34	40731134	YUTHIKA. P	BE CSE - AI
35	40731138	PODUTUR LAHARI	BE CSE - AI
36	40731143	SIRANGULA VYSHNAVI	BE CSE - AI





SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

Certificate of participation

THIS IS TO CERTIFY THAT

ABDUL SATHAR A

has successfully completed 30 hours

Value Added Course on **Insight to Robot** @ Robotics lab.

Sathyabama Centre for Advanced Studies from June 2023 to September 2023

Dr. T. Sasipraba,
Vice-Chancellor

Dr. T. Sasikala
DEAN SOC

Dr. S. Vigneshwari
HOD CSE

S. Preethi,
Scientist In-charge
MAKERSPACE

2. CYBUG'S GO PROGRAMMING

The Value Added Course in Cybug's GO programming was organized at School of Computing, Department of Computer Science and Engineering, at Sathyabama Institute of Science and Technology, in Sathyabama Centre for Advanced Studies - from 13th Feb 2023 to 05th April 2023. More than 30 students from various discipline has participated in this VAC program. The students were given different programs based on Go programming. From the program students learned to write GO programs for different problems.



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SCHOOL OF COMPUTING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Presents

CYBUG'S
Go Programming Language

Speakers


Dr. Veena K
Assistant Professor
CSE


Dr. Supriya S
Assistant Professor
CSE

VALUE ADDED COURSE

Chief Patrons:
Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Ms. Maria Catherine Jayapriya, Vice President

Patron:
Dr. T. Sasipraba, Vice Chancellor

Convenors:
Dr. T. Sasikala, Dean, School of Computing
Dr. L. Lakshmanan, Professor and Head, Dept of CSE
Dr. S. Vigneshwari, Professor and Head, Dept of CSE

Faculty Coordinators:
Dr. Veena K Assistant Professor, CSE
Dr. Supriya S Assistant Professor, CSE

Student Coordinator:
V. Ram Sainath Reddy, II year, CSE - Cyber Security

Registration Link:
<https://forms.gle/YgTTdBQZSTieVrXm9>




Commences : On Every FRIDAY
Date : 13.02.2023 to 05.04.2023
Timings : 03 : 15 P.M - 04 : 45 P.M


Sathyabama Centre for Advanced Studies

JOIN US!

COURSE CONTENT:

COURSE OBJECTIVES

- To setup and install Go language.
- To understand Go basics programs.
- To understand Functions and Packages in Go language.
- To implement the Pointers and memory management techniques.
- To Implement Error handling functions.

INTRODUCTION TO GO

6 Hrs.

Overview of Go and its history- Installation and setup of Go development environment- Basic code testing and running- Fundamental language, features and syntax of Go programming.

GO LANGUAGE BASICS

6 Hrs.

Data types(int , float, Bool, string)- Variables and Constants- Operators and expressions- Control structures(If statements, loops)

FUNTIONS AND PACKAGES

6 Hrs.

Defining and calling functions- Function parameters and return values- Types of functions (Built in functions and user define functions)-

Packages and modules- Modules types.

POINTERS AND MEMORY MANAGEMENT

6 Hrs.

Pointers in Go- Pointers with address- Memory management system- Understanding pointers in Go- Automatic memory management- Thread catching MALLOC- Garbage collector

ERROR HANDLING

6 Hrs.

command line arguments, errors and exceptions, handling exceptions, modules, packages; Illustrative programs: word count, copy file, Voter's age validation, Marks range validation (0-100)..

COURSE OUTCOMES

On completion of the course the student will be able to:

CO1: Develop algorithmic solutions to simple computational problems

CO2: Develop and execute simple GO programs.

CO3: Write simple GO programs using conditionals and looping for solving problems.

CO4: Decompose a GO program into functions.

CO5: Represent compound data using GO pointers and memory management

CO6: Implement techniques to solve error handling exceptions.

SCHEDULE:

Date	9.00 am to 10.00 am	10.00 am to 10.15 am	10.15 am to 12.15 Noon	12.15 Noon to 1.00 pm	1.00 pm to 04.00 pm
13.02.2023	Introduction	BREAK	Go language Basics	LUNCH	Operators and expressions
27.02.2023	Functions		Function parameters		Types of function
06.03.2023	Go Programming		Execution of Go Programs		Packages and modules
27.03.2023	Pointers		Memory management		Thread Catching Malloc
05.04.2023	Automatic Memory management		Error handling		Illustrative programs

Namelist of students enrolled in Cybug's GO programming Value added Course

S. No	Reg. no	Name	Branch
1	40731002	ADVAITH PRAKASH	BE CSE - AI
2	40731003	J. ADVIK	BE CSE - AI
3	40731004	M. ANISH	BE CSE - AI
4	40731010	BALAJI VISHWANATH. V.R	BE CSE - AI
5	40731012	BALAVINODHAN. R	BE CSE - AI
6	40731014	BHUMIREDDY LAVANYA	BE CSE - AI
7	40731015	BOPPANA BHARAT SATYA	BE CSE - AI
8	40731018	CHETHANA. K	BE CSE - AI
9	40731021	CHUNDRU KRISHNA PRANEETH	BE CSE - AI
10	40731022	CHUNDRU LEELA SRI CHOWDARY	BE CSE - AI
11	40731024	GADDAM LEKHAJ REDDY	BE CSE - AI
12	40731025	GAJJELA SAI CHARAN	BE CSE - AI
13	40731029	GOWTHAM. S	BE CSE - AI
14	40731040	KANNAN. R	BE CSE - AI
15	40731041	KARTHIK KRISHNA. K.G	BE CSE - AI
16	40731047	KOMMARAJU SAI PRANEETH BABU	BE CSE - AI
17	40731048	KOTHAPALLI SUJITH REDDY	BE CSE - AI
18	40731051	KURRI ABHINAV REDDY	BE CSE - AI
19	40731052	LAKKARAJU ALEKHYA	BE CSE - AI
20	40731054	LEVAKU VENKATA KOWSHIK REDDY	BE CSE - AI
21	40731057	MAMILLAPALLI SIVA RAMA KRISHNA	BE CSE - AI
22	40733001	ABDUL RAHUMAN. M	BE CSE-DS
23	40733002	K. AGASH	BE CSE-DS
24	40733003	AJAY MUPPA	BE CSE-DS
25	40733004	BALAGUNDLA SUDHEERKUMAR	BE CSE-DS
26	40733005	BALAMURUGAN. K	BE CSE-DS
27	40733006	BANALA SILAS	BE CSE-DS
28	40733007	CHARAN TEJA JAGARLAMUDI	BE CSE-DS
29	40733008	CHAVVAKULA SATYA SURESH	BE CSE-DS
30	40733009	EGGIREDDY KAMAL	BE CSE-DS

31	40733010	ESWAR. M	BE CSE-DS
32	40733011	GOKUL. M	BE CSE-DS



3. PYTHON PROGRAMMING

The Value Added Course in Python programming was organized at School of Computing, Department of Computer Science and Engineering at Sathyabama Institute of Science and Technology, in Sathyabama Centre for Advanced Studies - from 20th Feb 2023 to 10th April 2023. More than 30 students from various discipline has participated in this VAC program. The students were given different programs based on real time scenarios. From the program students learned to write python programs for different problems.



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SCHOOL OF COMPUTING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
Organises
VALUE ADDED COURSE
On
PYTHON PROGRAMMING



Mrs. V. Subapriya
Assistant Professor, CSE



20.2.2023 to 10.4.2023
(All Monday's)



3:30 pm to 4:30 pm



**Sathyabama Centre for
Advanced Studies**

E-certificate will be provided for all participants

CHIEF PATRONS
Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Ms. Maria Catherine Jayapriya, Vice President

CONVENORS
Dr. T. Sasikala, Dean, School of Computing
Dr. L. Lakshmanan, HOD, CSE
Dr. S. Vigneshwari, HOD, CSE

Faculty Coordinator
Mrs. V. Subapriya, Assistant Professor, CSE

PATRON
Dr. T. Sasipraba, Vice Chancellor

Student Coordinator
Palivela Thanishka, Ilyr AI & ML, CSE



REGISTER NOW

COURSE CONTENT:

COURSE OBJECTIVES

- To understand why Python is a useful scripting language for developers.
- To learn how to use lists, tuples, and dictionaries in Python programs.
- To build and package Python modules for reusability.
- To understand how to read and write files in Python.
- To learn how to use exception handling in Python applications for error handling.
- To design and program Python applications.

INTRODUCTION

6 Hrs.

History of Python- Introduction to the IDLE interpreter (shell) - Data Types - Built-in function – Conditional statements - Iterative statements- Input/output functions - Compound Data Types - Nested compound statements

OBJECT ORIENTED CONCEPTS

6 Hrs.

Class – Objects – Constructors –Getters and Setters- Polymorphism – Encapsulation -Inheritance -Data Abstraction- Method Overloading-Method Overriding-Data Hiding-Import Class

FILES AND EXCEPTIONS HANDLING, MODULES, PACKAGES

6 Hrs.

File Operations –Iterators - Exception handling - Regular Expressions- Creating Modules-Import Statement Introduction to PIP-Installing Packages via PIP-Using Python Packages.

GUI PROGRAMMING

6 Hrs.

GUI Programming in Python - Introduction to GUI library - Layout management - Events and bindings - Fonts – Colours - Canvas - Widgets (frame, label, button, check box, entry, list box, message, radio button, text, spin box.

DATABASE AND NETWORK

6 Hrs.

Database (using NoSQL): Connector Module –Cursor – Statements - Exceptions in database. Network connectivity: Socket module - Client – Server –Email – URL Access.

COURSE OUTCOMES

On Completion of course student will able to

CO1: Describe the Numbers, Math functions, Strings, List, Tuples and Dictionaries in Python.

CO2: Do the decision making and write functions in Python.

CO3: ExplainhowtodesignGUIApplicationsinPythonandevaluatedifferentdatabaseoperations.

CO4: Design and develop Client Server network applications using Python.

CO5: Ability to design real life situational problems and think creatively about solutions of them.

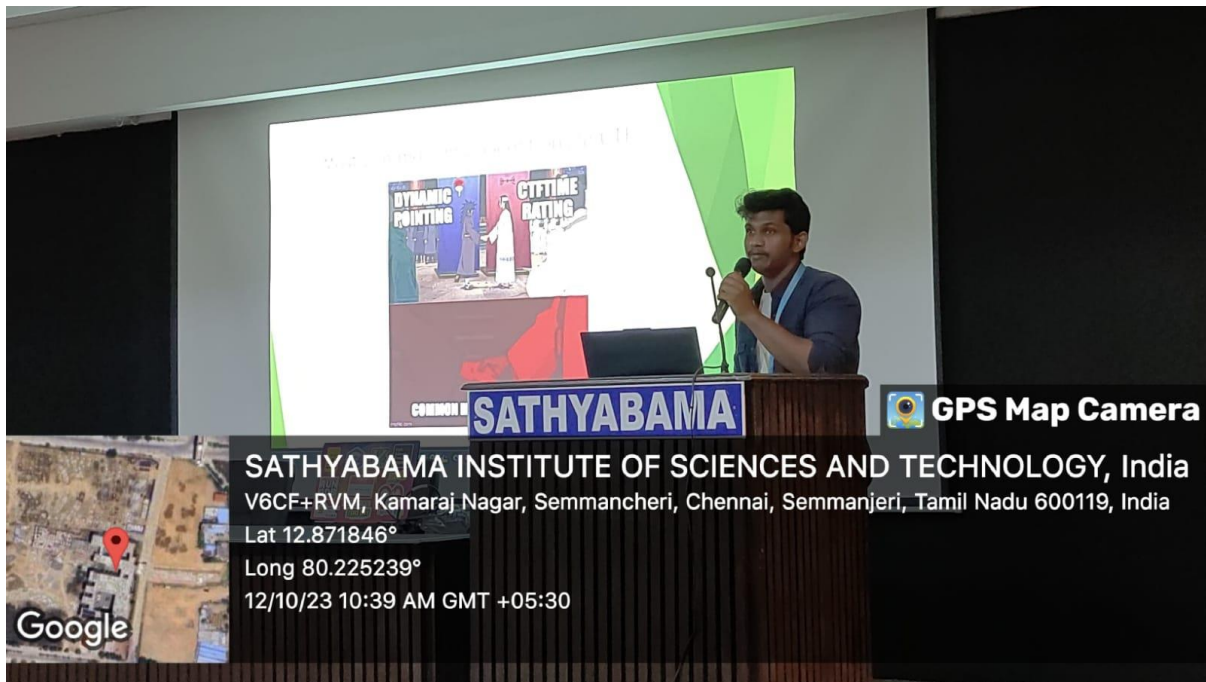
CO6: Apply the best features of mathematics, engineering and natural sciences to program real life problems.

SCHEDULE:

Date	9.00 am to 10.00 am	10.00 am to 10.15 am	10.15 am to 12.15 Noon	12.15 Noon to 1.00 pm	1.00 pm to 04.00 pm
20.02.2023	Introduction	BREAK	Object Oriented Concepts		Encapsulation and Data abstraction
06.03.2023	Files& Exceptions		Modules and Packages		Install of PIP packages
20.03.2023	GUI Programming		Layout Management		Introduction to GUI Library
03.04.2023	List		Tuples & Dictionaries		Functions
10.04.2023	File handling		Command line Prompt		Exception Handling

Namelist of students enrolled in Python programming Value added Course

<u>S.No</u>	Reg no	Name	BRANCH
1	40731014	BHUMIREDDY LAVANYA	BE CSE - AI
2	40731015	BOPPANA BHARAT SATYA	BE CSE - AI
3	40731018	CHETHANA. K	BE CSE - AI
4	40731021	CHUNDRU KRISHNA PRANEETH	BE CSE - AI
5	40731022	CHUNDRU LEELA SRI CHOWDARY	BE CSE - AI
6	40731024	GADDAM LEKHAJ REDDY	BE CSE - AI
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15	40731054	LEVAKU VENKATA KOWSHIK REDDY	BE CSE - AI
16	40731057	MAMILLAPALLI SIVA RAMA KRISHNA	BE CSE - AI
17	40733001	ABDUL RAHUMAN. M	BE CSE DAIML
18	40733002	K. AGASH	BE CSE AIML
19	40733003	AJAY MUPPA	BE CSE AIML
20	40733004	BALAGUNDLA SUDHEERKUMAR	BE CSE DATA SCIENCE
21	40733005	BALAMURUGAN. K	BE CSE DATA SCIENCE
22	40733006	BANALA SILAS	BE CSE DATA SCIENCE
23	40733007	CHARAN TEJA JAGARLAMUDI	BE CSE DATA SCIENCE
24	40733008	CHAVVAKULA SATYA SURESH	BE CSE DATA SCIENCE



4. DEEP LEARNING ESSENTIALS

The Value Added Course in Deep Learning was organized at School of Computing, Department of Computer Science and Engineering, at Sathyabama Institute of Science and Technology, in Sathyabama Centre for Advanced Studies - from 15th Feb 2023 to 03rd April 2023. More than 25 students from various discipline has participated in this VAC program.



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SCHOOL OF COMPUTING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Organizes

VALUE ADDED COURSE ON DEEP LEARNING





15th Feb, 2023 to 3rd April, 2023
(Every Wednesday)



3:30pm to 4:45pm



Sathyabama centre for advanced studies



Dr. D. Menaka,
Assistant Professor, CSE,
Resource person

REGISTER NOW

<https://forms.gle/CnD8rFFJcjAVLtHc7>

CHIEF PATRONS

Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President
Ms. Maria Catherine Jayapriya, Vice president

PATRON

Dr. T. Sasipraba, Vice chancellor

CONVENORS

Dr. T. Sasikala, Dean, School of Computing
Dr. L. Lakshmanan, HOD, CSE
Dr. S. Vigneshwari, HOD, CSE

Faculty Coordinators

Dr. D. Menaka, Assistant Professor, CSE

Student Coordinators

Mr. Harish B, 3rd Year, CSE-DS
Ms. Srinithi D, 3rd Year, CSE-AI
Ms. Chethana K, 3rd Year, CSE-AI

30 SEATS ONLY

Certificate will be provided after successful completion of the course

COURSE CONTENT:

COURSE OBJECTIVES

- To introduce Deep Learning concepts.
- To understand Linear regression and predictive models.
- To understand classification and clustering techniques.
- To understand the ensembling of models and its techniques.
- To apply reinforcement learning techniques.

INTRODUCTION TO DEEP LEARNING

6 Hrs.

What is Deep Learning – Examples of Deep Learning Applications -Types of Deep Learning Techniques - Learning a class from Examples - Vapnik-Chervonenkis Dimension - Probably Approximately Correct Learning – Gradient Descent – Bias and Variance- Overfitting- Underfitting-Confusion Matrix.

ARTIFICIAL NERON NETWORKS (ANN)

6 Hrs.

ANN -with one variable-with multiple variables--Multiple Linear regression-Non linear regression-Regression analysis-Predictive models - Prediction using Logistic Regression- Classification Models-KNN Classification- Naïve Bayes Classification- Decision Tree Classification-Support vector Machine- Random Forest- Classification vs Regression.

UNSUPERVISED LEARNING

6 Hrs.

Clustering-K Means Clustering-Supervised Learning after Clustering-Density Based Clustering Methods-Hierarchical Based clustering methods-Partitioning methods- Grid based methods. Dimensionality Reduction: Linear Discriminant Analysis -Principal Component Analysis.

ENSEMBLING MODELS

6 Hrs.

Need of Ensembling- Applications of Ensembling – Types of Ensembling : Basic Ensemble Techniques-Advanced Ensemble Techniques : Bagging, Boosting, Stacking, Blending - Techniques of Ensembling - AdaBoost.

REINFORCEMENT LEARNING

6 Hrs.

Introduction- RL Framework- Temporal Difference Learning -Active Reinforcement Learning- Markov Decision Process Model - Learning Expectations-Learning Algorithms-Q learning Algorithm-Case Study: Implementation of Q learning in automotive games.

COURSE OUTCOMES

On completion of the course the student will be able to:

CO1: Reduce the dimension of the dataset with Deep Learning techniques

CO2: Implement the predictive analytics for any real scenario

CO3: Implement applications with clustering and classification techniques

CO4: Implement the ensembling models.

CO5: Learn and apply reinforcement techniques.

CO6: Design a case study on the business/automotive data and compare the performance of the Classifiers and algorithms.

Date	9.00 am to 10.00 am	10.00 am to 10.15 am	10.15 am to 12.15 Noon	12.15 Noon to 1.00 pm	1.00 pm to 04.00 pm
15.02.2023	Introduction	BREAK	Deep Learning methods	LUNCH	Application of Deep Learning

SCHEDULE:

29.02.2023	Intro to Artificial Nueron Network		ANN's methodologies		Types of Regressions
12.03.2023	Differences between various regressions		Supervised Learning		Depths of Supervised Learning
29.03.2023	Unsupervised Learning		Clustering		Ensembling models
03.04.2023	Stacking models		Reinforcement Learning		RL learning methods

Namelist of students enrolled in Deep Learning Value added Course

S.No	Reg no	Name	BRANCH
1	41614011	CHALLA SUBRAMANYAM	BE CSE-CYBER SECURITY
2	41614014	CHIRANJEET KUMAR	BE CSE-CYBER SECURITY

3	41614015	CHUNDURU T V PRASANNA SRIDEVI	BE CSE-CYBER SECURITY
4	41614018	DINESH S	BE CSE-CYBER SECURITY
5	41614019	K M DIXIT MANNA	BE CSE-CYBER SECURITY
6	41614020	DOKKU NIREEKSHAN KUMAR	BE CSE-CYBER SECURITY
7	41614021	DONTAMSETTI PHANIDHAR	BE CSE-CYBER SECURITY
8	41614024	K. GANESH	BE CSE-CYBER SECURITY
9	41614025	GARAPATI RAM GANGADHAR CHOWDARY	BE CSE-CYBER SECURITY
10	41614026	GIRIDHAR S	BE CSE-CYBER SECURITY
11	41614027	GOLUGURI SAMPATH REDDY	BE CSE-CYBER SECURITY
12	41614030	HANNAH HARSHITHA	BE CSE-CYBER SECURITY
13	41614033	HEARTLIN GARDON B F	BE CSE-CYBER SECURITY
14	41613012	KOTTURI PRADEEP	BE CSE-BLOCK CHAIN
15	41613013	PATHIPATI VENKATA MOHAN	BE CSE-BLOCK CHAIN
16	41613014	MONDOJI RIYAZ KHAN	BE CSE-BLOCK CHAIN
17	41613015	PEMMARAJU SHABAREESH	BE CSE-BLOCK CHAIN
18	41613016	PILLARI SAI DHARMITHA	BE CSE-BLOCK CHAIN
19	41613017	PUTTA SRI HARSHA	BE CSE-BLOCK CHAIN
20	41613018	SRIMATHI J K	BE CSE-BLOCK CHAIN
21	41613019	TANIKELLA HARI GAYATRI	BE CSE-BLOCK CHAIN
22	41613020	TATIREDDY VENKATA NITHIN REDDY	BE CSE-BLOCK CHAIN
23	41613021	THAMBALA KALYAN	BE CSE-BLOCK CHAIN
24	41613022	THOTAKURA RAJEEV	BE CSE-BLOCK CHAIN



5. YOGA FOR LIFE

The Value Added Course in Yoga for Life was organized at School of Computing, Department of Computer Science and Engineering, at Sathyabama Institute of Science and Technology, in Sathyabama Centre for Advanced Studies - from 15th Feb 2023 to 03rd April 2023. More than 25 students from various discipline has participated in this VAC program. It was an effective sessions which was so much helpful in refreshing the young minds, body and soul.



SATHYABAMA
INSTITUTE OF SCIENCE AND TECHNOLOGY
(DEEMED TO BE UNIVERSITY)
www.sathyabama.ac.in



Department of Computer Science and Engineering
(SPECIALIZATION)

Yoga For Life



2023

CHIEF GUEST

Dr. Mariazeena Johnson, Chancellor
Dr. Marie Johnson, President



FACULTY COORDINATORS :

Ms. Abinaya.K, Asst. Prof, CSE

Date: 22nd FEBRUARY to 22nd MARCH 2023

Time: 10 a.m

Venue: Advanced studies

COURSE CONTENT:

Syllabus of Yoga Education(Theory & Practical)

The course content has been broadly divided into two parts. In the first part of the program it was conducted for the various department students. In the second part of the program both staffs and students have been formulated.

(A) Main Recommendations:-

Yogamay betaughtinformally todevelopphysicalandmoralvalues throughsimpleSukshmaVyayamaandinterestingstoriesbasedo nYama and Niyama. Yoga teacher may be entrusted with the responsibility to train the teachers forthispurpose duringtheIn-servicecourses.

PhysicalYogicActivities:-

1. YogicSukshmaVyayama(excersiseNo.1-10)
2. Vajrasana,Tadasana
3. Walkingonstraightlinetodevelopconcentration
4. Relaxation

ValueEducationBasedonYama&Niyama:-

1. Lessonsonpersonalandgeneralhygiene.
2. Cleantheteetheveryday morningand evening.
3. Takebatheverydayif weatherpermits.
4. Changesclotheseveryday.
5. Oilandcombthehaireveryday.
6. Washhandswithsoapbeforeandaftertakingmeals.
7. Doprayer beforethe meals.
8. Emphasizeontellingtruth,non-violenceandnon-stealing.
9. Obeythe parents,teachersand elders.
10. Inspiretodoatleastonegoodturn(help/ service)everyday.
11. Becourteousanddon'tabuse.
12. Developthehabitof keepingthethingsatproperplace.
13. Avoidlittering.
14. Learnyourlessonseveryday.

(B) Programme for Students:-

Class	Practical	Theory
VI	Shathakarma -kapalbhati(11-30storkes) Shukshnavyayama - No 1-11 Asanas - Trikonasana, Ardha- Kati,Chakrasana,Tadasana,Vrikshasana, Padmasana, Simhasana,Paschimottanasana, Uttanpadasana,Salabhasana, Shavasana Pranayama - Bhastrika Concentration -Onown breath(2 minutes)OhmChantingandshantipath.	1. YogaDefinition 2. Knowledge of five yama with moreemphasison‘ Asteya ’ 3. Knowledge of five Niyama withemphasison‘ Santosh ’ 4. KnowledgeofAahar-Vihar 5. MethodsandbenefitsofSukshmaV yayama,Asanasandprayers.
VII	Shatha karma - Introduction of Tratakaand Practice of concentration on nose- tip. Shukshnavyayama -No12-23 Asanas -Garudasana,Ek-PadPranamasanaKati Chakrasana, UrdhavaHastottanasana,Natrajasana, Parvatasana, Kukkutasana,Pawanmuktasana,Bhujangasana,S havasana Pranayama -Bhramari Concentration - On own breath (3minutes)OhmChantingandshantipath.	1. Knowledge of Yama with moreemphasison‘ Ahimsa ’ 2. Knowledge of Niyama withemphasison‘ Shauch ’ 3. A brief Knowledge of different typeof yoga (Bhakti, Jnana, Karma andHathaYoga) 4. MethodsandbenefitsofSukshmaV yayama,Asanasandprayer.
VIII	Shatha karma - Introduction of Nauli Shukshnavyayama - No 24- 32 Asanas -PadaHastasana,Urdhv Pranamasana, Konasana, Vajrasana, SuptaVajrasana,Shashankasana,Gomukhasana, Janusirasana, Naukasana, Halasana,Chakrasana,Shavasana,SuryaNamask ar(ifpossible) Pranayama - Anuloma- Viloma(Nadishodhan) Concentration -Onownbreath(So- ham)OhmChantingand shantipath.	1. Knowledge of Yama with moreemphasis on ‘ Satya ’ &‘ Aparigrah ’ 2. Knowledge of Niyama withemphasis on ‘ Swadhyaya ’ &‘ Iswarpranidhan ’ 3. Simple anatomical andphysiologicalaspectsofHum anbody 4. MethodsandBenefitsofSukshmaV yayama,AsanasandPranayama 5. Personal importance of hygiene andhealth.
IX	Shatha karma - JalaNeti (if facilityAvailable) Shukshnavyayama - No 33- 48 Asanas - Trikonasana, Tadasana,Natrajasana,KatoChakaras ana,	1. Knowledge of Yama with moreemphasison‘ Brahmchary a ’ 2. Knowledge of Niyama withemphasison‘ Tapa ’ 3. Relationshipofyogaand education.

	Baddhapadmasana, Ushtrasana, Paschimottanasana, Bakasana, Kurmasana, Ardha Marsyendrasana, Makrasana, Dhanurasana, Shavasana, Surya Namaskar (if possible) Pranayama- Ujjayi and Suryabhedan Concentration- In between eyebrows, Ohm Chanting and shanti path.	4. Methods and benefits of Sukshma Vyayama, Asanas and Prayer. 5. Brief knowledge of 'Astanga' Yoga. 6. Importance of 'Satvic Aahar'.
X	Shatha karma- Trataka Shukshma vyayama- One or Two Vyayama for each part of body Asanas- Trikonasana, Vrikshasana, Parivrat Trikonasana, Padmasana, Yogmudra, Matsyasana, Mandukasana, Vristitapada Bhoonam, asana, Pawanmuktasana, Vipritkarni, Shavasana, Yoganidra Pranayama- Bhramari, Sheetkari Concentration- on 'Dot' or 'Ohm', Ohm Chanting and shanti path.	1. Objectives of yoga Education. 2. Difference between Yoga Asana and physical exercises. 3. Importance of Yoga in daily life. 4. Methods and benefits of Asanas, Pranayama and Concentration
XI	Shathakarma- Kunjal, jala neti & Nauli (if facilities available) Shukshma vyayama- One or Two Vyayama for each part of body Asanas- Surya Namaskar, Gomukhasana, Parvatasana, Supta Vajrasana, Hanumanasana, Sarvangasana, Uttanpadasana, Dhanurasana, Shavasana Bandhya- Moola, Uddiyana and Jalandhar Pranayama- Bhastrika, Nadisodhan Concentration- on 'Dot' or 'Ohm', Ohm Chanting and shanti path.	1. Role of yoga in character building 2. Therapeutic values of yoga 3. Introduction of yoga literature 4. Life history of Arvind, Vivekananda and other yogis 5. Knowledge of Bandha, Mudra and Chakras 6. Methods and benefits of Asanas, Pranayama and Concentration
XII	Shathakarma- Shathakriyas by rotation (if facilities available) Shukshma vyayama- One or Two Vyayama for each part of body Asanas- All kinds of Asanas by rotation depending upon facilities Bandhya- Moola, Uddiyana and Jalandhar Pranayama- kapalbhati, Bhramari, Ujjayi Concentration- on 'Dot' or 'Ohm' & Trataka Ohm Chanting and shanti path.	1. Effects of Asanas and Pranayama on physiology of human body 2. Concept of Nishkama Karma Yoga 3. Role of Yoga practices in developing concentration, willpower and discipline 4. Techniques of stress management 5. Methods and benefits of Asanas, Pranayama and concentration

SCHEDULE:

	9.00 am to 10.00 am	10.00 am to 10.15 am	10.15 am to 12.15 Noon	12.15 Noon to 1.00 pm	1.00 pm to 04.00 pm
22.02.2023	Introduction	BREAK	Yogic Instructions	LUNCH	Physical and moral values
01.03.2023	Yoga activities		Yogic SukshmaVyayama		Vajrasana, Tadasana
08.03.2023	Walking on straight line to develop concentration		Relaxation		Value Education Based on Yama &Niyama
15.03.2023	Knowledge of Yama with moreemphasis on ‘Satya’ &‘Aparigrah’		Swadhyaya&Iswarpranidhan		Anatomical andphysiological aspects of Humanbody
22.03.2023	Methods and Benefits of SukshmaVyayama, Asanas and Pranayama		Personal importance of hygiene andhealth.		Conclusion and Relaxation

S.NO.	Register Number	Roll Number	Name	BRANCH
1	41733061	21S733105	RESHMI T	BE-CSE- DATA SCIENCE
2	41733026	21S733106	HARIHARAN V	BE-CSE- DATA SCIENCE
3	41733081	21S733504	VELAVAN S	BE-CSE- DATA SCIENCE
4	41733046	21S733505	MOHAMMED YASSIN A	BE-CSE- DATA SCIENCE
5	41733045	21S733506	MANNEPALLI HARSHINI	BE-CSE- DATA SCIENCE
6	41733080	21S733515	VARSHITHA KAMMA	BE-CSE- DATA SCIENCE
7	41613017	21S613506	PUTTA SRI HARSHA	BE CSE-BLOCK CHAIN
8	41613018	21S613502	SRIMATHI J K	BE CSE-BLOCK CHAIN
9	41613019	21S613501	TANIKELLA HARI GAYATRI	BE CSE-BLOCK CHAIN
10	41613020	21S613512	TATIREDDY VENKATA NITHIN REDDY	BE CSE-BLOCK CHAIN
11	41613021	21S613522	THAMBALA KALYAN	BE CSE-BLOCK CHAIN
12	41613022	21S613510	THOTAKURA RAJEEV	BE CSE-BLOCK CHAIN
13	41613028	21S613524	PINNI BOINA VENKATA NAGA MANIKANTA	BE CSE-BLOCK CHAIN
14	41614021	21S614600	DONTHAMSETTI PHANIDHAR	BE CSE-CYBER SECURITY
15	41614024	21S614576	K. GANESH	BE CSE-CYBER SECURITY
16	41614025	21S614539	GARAPATI RAM GANGADHAR CHOWDARY	BE CSE-CYBER SECURITY
17	41614026	21S614524	GIRIDHAR S	BE CSE-CYBER SECURITY
18	41614027	21S614507	GOLUGURI SAMPATH REDDY	BE CSE-CYBER SECURITY
19	41614030	21S614553	HANNAH HARSHITHA	BE CSE-CYBER SECURITY

