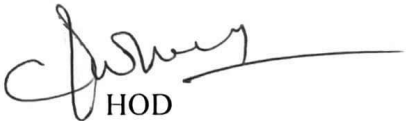




Dr. Ambedkar Institute of Technology
Electronics and communication Department

The enclosed documents are valid and verified.



HOD

ECE Department

HOD

Dept. of Electronics and Communication Engg

Dr. Ambedkar Institute of Technology

Bengaluru - 560056



Panchajanya Vidya Peetha Welfare Trust (R)
Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY
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BDA Outer Ring Road, Mallathalli, Bengaluru-56&



REPORT

TEQIP – III Sponsored
15 Days Online Future Skill Training Program For Students on
“Artificial Intelligence and Machine Learning”
From
1st to 18th September 2021

Organized by Department of Computer Science and Engineering and Department of Electronics and Communication, Dr. AIT

Fifteen Day Future Skill Training Program For Students on “**Artificial Intelligence and Machine Learning**” was organized for Students of Final and Pre Final year students of Dr AIT from 1st -18th September 2021, with Chief Coordination by Dr. Siddaraju, Prof. and Head, Department of CSE and Dr. Ramesh S, Prof. and Head, Dept. of ECE and coordinated by **Srinivas A. H**, Associate Professor, Dept. of CSE, **Swamy T. N**, Assistant Professor, Dept. of ECE, **Shalini N**, Assistant Professor, Dept. of CSE.

Around 83 participants had registered for this program with **14 Students from CSE, 68 students from ECE and 01 from EIE of Dr. Ambedkar Institute of Technology**. Resource person were **Srinivas A. H**, Associate Professor, Dept. of CSE, **Swamy T. N**, Assistant Professor, Dept. of ECE, **Shalini N**, Assistant Professor, Dept. of CSE, Dr. AIT. They have enormous teaching experience in the field of Image Processing, Artificial Intelligence-Machine Learning, VLSI. Also published many research papers in reputed indexed Journals. Also trained faculties and students in various colleges.

Inaugural Session started with Welcome address by Shalini N, Coordinator, Asst. Professor Dept. of CSE. Swamy T. N., Coordinator & Resource Person, Asst. Professor Dept. of ECE explained the Course contents and learning objectives to participants followed by HOD's Address to participants. TEQIP-3 Coordinator, Dr. Mahalinga V Mandi, addressed the Participants and mentioned the importance of the course. Also participants were informed that

test will be conducted by NASSCOM. And finally inaugural session ended with Vote of Thanks by Srinivas, Coordinator, and Associate. Professor Dept. of CSE.

Session was followed by a Valedictory Function which was attended by HOD, Dr. Ramesh S, faculty members of ECE Department and participants, where in the Resource Person briefed about topics covered and outcomes, HoD addressed the participants, and he insisted coordinators to share the recorded video for all participants followed by Feedback by participants and Vote of Thanks By Srinivas A. H, Coordinator, Associate. Professor, Dept. of CSE. Test was conducted using Google forms. Certificates were mailed to participants on providing or filling the Feedback Form and taking test. 15 days future skill training program was successfully completed.



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An Autonomous Institution, Aided by Government of Karnataka, Accredited by NAAC and Affiliated to VTU, Belagavi
Outer Ring Road, Mallathahalli, Bengaluru 560056.
TEQIP-III Sponsored

15 Days Online Future Skill Training for Students
on
“Artificial Intelligence and Machine Learning”
Date: 01/09/2021, to 18/09/2021
Organized by
Department of Electronics and Communication Engineering
Department of Computer Science and Engineering

Coordinators: Srinivas A. H, Swamy T.N, Shalini N

Coordinators

1. Srinivas A. H,
2. Swamy T. N
3. Shalini N

Organized by Dept. of CSE and ECE, Dr.AIT, Bengaluru from 1st – 18th September 2021.

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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BDA Outer Ring Road, Mallathalli, Bengaluru-56

Registered Students list

TEQIP-3 Sponsored Future Skill Training Program on Artificial Intelligence and Machine Learning

From 1st to 18th September 2021

S L N O	Student Name	USN	Dep art men t	Gender	Email	Cate gory
1	ANUPAMA A S	1DA18CS019	CSE	Female	anupamaas12@gmail.com	OBC
2	SAHANA K.S	1DA19EC122	ECE	Female	sahanasanju2002@gmail.com	OBC
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4	VAISHALI B	1DA18CS177	CSE	Female	vaishu0313@gmail.com	OBC
5	TEGGINAMATHA DA BASAVANANDA	1DA20EC423	ECE	Male	cscvle007@gmail.com	GM
6	PADMASHREE A	1DA19EC180	ECE	Female	padmashree.a145@gmail.com	GM
7	SUSHMITHA. A	1DA19EC153	ECE	Female	1da19ec153.ec@drait.edu.in	SC
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9	ANUSHA H	1DA19EC016	ECE	Female	anushah23042001@gmail.com	OBC
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Registered Students list

TEQIP-3 Sponsored Future Skill Training Program on Artificial Intelligence and Machine Learning

From 1st to 18th September 2021

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BDA Outer Ring Road, Mallathalli, Bengaluru-56

Registered Students list

TEQIP-3 Sponsored Future Skill Training Program on Artificial Intelligence and Machine Learning

From 1st to 18th September 2021

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Registered Students list

TEQIP-3 Sponsored Future Skill Training Program on Artificial Intelligence and Machine Learning

From 1st to 18th September 2021

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Coordinators

1. Srinivas A. H,
2. Swamy T. N
3. Shalini N

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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BDA Outer Ring Road, Mallathalli, Bengaluru-56

TEQIP-3 Sponsored Future Skill Training Program on Artificial Intelligence and Machine Learning

From 1st to 18th September 2021

SYLLABUS

Module 01: Fundamentals of Modern AI

- History of AI
- Mathematical Basics (Linear Algebra, Probability)
- Classical AI (Search Algorithms)
- Basics of ML (Classification, Regression, Clustering)

Module 02: Deep Learning

- Neural Networks
- Back Propagation
- Deep Learning Architectures
- Training DNNs and Hyper Parameters
- Unsupervised Deep Learning

Module 03: Perception

- Problems related to
 - Text
 - Images
 - Speech

Module 04: Planning

- Planning under Uncertainty
- Markov Decision Processes
- Partially Observable MDPs
- Multi Agent Systems

Practical Sessions

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

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BDA Outer Ring Road, Mallathalli, Bengaluru-56

TEQIP-3 Sponsored Future Skill Training Program on Artificial Intelligence and Machine Learning

From 1st to 18th September 2021

SYLLABUS

The practical sessions are designed to provide users a familiarity with AI and ML systems. These sessions will utilize modern ML frameworks and programming tools such as Python notebooks. The participants will also learn to connect and work with computational servers for large-scale learning and evaluation tasks. The specific themes and problems include:

1. Training, Testing and Hyper-parameter tuning

Most modern AI systems are developed based on learning from large datasets. The participants will learn the art of training and evaluation of ML algorithms.

2. Neural Network Learning, Classification and Regression

These problems will require the development of system that do classification and regression tasks using neural network models.

3. Deep Learning in Text, Image and Speech

Here, we will explore various perception problems using text, image and speech data. The participants will be able to develop basic recognition modules for these input modalities.

4. Developing Intelligent Agents

In this part, the participants will get hands-on training in development of autonomous agents that modify their behavior based on its environment

5. In addition, there will also be a Mini Project, where the participants will develop a practical and complete AI system and understand various aspects of problem

Formulation, data collection and annotation, model selection, training and evaluation, and deployment of such a system.

Dr. Ambedkar Institute of Technology, Bangalore
 Department of Electronics and Communication Engineering
**Future Skilled Program on Artificial Intelligence and Machine
 Learning (AI-ML)**
1st September – 18th September, 2021
 Work Done Statement

Day-1: 1st September 2021			
Lecture 1:	10 AM – 11 AM	History of AI	Ms. Shalini N
Lecture 2:	11 AM – 12 PM	Mathematical Basics - Linear Algebra	Ms. Shalini N
Lecture 3:	02 PM – 03 PM	Mathematical Basics - Linear Algebra	Ms. Shalini N
Lecture 4:	03 PM – 04 PM	Lab Session	Mr. Swamy T N
Day-2: 2nd September 2021			
Lecture 5:	10 AM – 11 AM	Mathematical Basics - Probability	Ms. Shalini N
Lecture 6:	11 AM – 12 PM	Mathematical Basics - Probability	Ms. Shalini N
Lecture 7:	02 PM – 03 PM	Classical AI (state space representation)	Ms. Shalini N
Lecture 8:	03 PM – 04 PM	Lab Session	Mr. Swamy T N
Day-3: 3rd September 2021			
Lecture 9:	10 AM – 11 AM	Classical AI (state space search - deterministic algorithms)	Ms. Shalini N
Lecture 10:	11 AM – 12 PM	Classical AI (State space search - heuristic search)	Ms. Shalini N
Lecture 11:	02 PM – 03 PM	Classical AI (state space search - A* search)	Ms. Shalini N
Lecture 12:	03 PM – 04 PM	Lab Session	Srinivasa A H
Day-4: 4th September 2021			
Lecture 13:	10 AM – 11 AM	Classical AI (Randomized algorithms)	Ms. Shalini N
Lecture 14:	11 AM – 12 PM	Classical AI (Genetic algorithm)	Ms. Shalini N

Dr. Ambedkar Institute of Technology, Bangalore
 Department of Electronics and Communication Engineering
**Future Skilled Program on Artificial Intelligence and Machine
 Learning (AI-ML)**
1st September – 18th September, 2021
 Work Done Statement

Lecture 15:	02 PM – 03 PM	Classical AI (Prolog)	Ms. Shalini N
Lecture 16:	03 PM – 04 PM	Lab Session	Srinivasa A H
Day-5: 6th September 2021			
Lecture 17:	10 AM – 11 AM	Classical AI (General Concepts of Pattern Recognition)	Ms. Shalini N
Lecture 18:	11 AM – 12 PM	Machine Learning - Vector based representation & Problem Formulation	Ms. Shalini N
Lecture 19:	02 PM – 03 PM	Machine Learning - Different types of loss functions	Ms. Shalini N
Lecture 20:	03 PM – 04 PM	Lab Session	Srinivasa A H
Day-6: 7th September 2021			
Lecture 21:	10 AM – 11 AM	Machine Learning - Gradient Descent and Stochastic Batch Gradient Descent	Swamy T N
Lecture 22:	11 AM – 12 PM	Machine Learning - Decision Tree Classifier	Swamy T N
Lecture 23:	02 PM – 03 PM	Machine Learning - Decision Tree Regression	Swamy T N
Lecture 24:	03 PM – 04 PM	Lab Session	Srinivasa A H
Day-7: 8th September 2021			
Lecture 25:	10 AM – 11 AM	Machine Learning - Bias and Variance Trade Off	Swamy T N
Lecture 26:	11 AM – 12 PM	Machine Learning - Ensemble methods - Bagging, Boosting and Random Forest	Swamy T N
Lecture 27:	02 PM – 03 PM	Machine Learning - Missing Values, Data Imbalance, Noise	Swamy T N

Dr. Ambedkar Institute of Technology, Bangalore
 Department of Electronics and Communication Engineering
**Future Skilled Program on Artificial Intelligence and Machine
 Learning (AI-ML)**
1st September – 18th September, 2021
 Work Done Statement

Lecture 28:	03 PM – 04 PM	Lab Session	Srinivasa A H
Day-8: 9th September 2021			
Lecture 29:	10 AM – 11 AM	Introduction to Neural Networks & Back Propagation	Swamy T N
Lecture 30:	11 AM – 12 PM	Introduction to Neural Networks & Back Propagation	Swamy T N
Lecture 31:	02 PM – 03 PM	Neural Networks - Activation Functions and Loss functions, Automatic Differentiation	Swamy T N
Lecture 32:	03 PM – 04 PM	Lab Session	Ms. Shalini N
Day-9: 11th September 2021			
Lecture 33:	10 AM – 11 AM	Neural Networks Classification Formulation	Swamy T N
Lecture 34:	11 AM – 12 PM	Introduction to fully connected neural network	Swamy T N
Lecture 35:	02 PM – 03 PM	Introduction to auto-encoder	Swamy T N
Lecture 36:	03 PM – 04 PM	Lab Session	Ms. Shalini N
Day-10: 13th September 2021			
Lecture 37:	10 AM – 11 AM	Introduction to convolutional neural networks	Swamy T N
Lecture 38:	11 AM – 12 PM	Introduction to convolutional neural networks	Swamy T N
Lecture 39:	02 PM – 03 PM	Introduction to Recurrent Neural Networks	Swamy T N
Lecture 40:	03 PM – 04 PM	Lab Session	Ms. Shalini N
Day-11: 14th September 2021			
Lecture 41:	10 AM – 11 AM	Introduction to Generative Adversarial Networks	Srinivasa A H
Lecture 42:	11 AM – 12	Introduction to Recurrent Neural	Srinivasa A H

Dr. Ambedkar Institute of Technology, Bangalore
 Department of Electronics and Communication Engineering
**Future Skilled Program on Artificial Intelligence and Machine
 Learning (AI-ML)**
1st September – 18th September, 2021
 Work Done Statement

	PM	Networks	
Lecture 43:	02 PM – 03 PM	Introduction to Recurrent Neural Networks	Srinivasa A H
Lecture 44:	03 PM – 04 PM	Lab Session	Mr. Swamy T N
Day-12: 15th September 2021			
Lecture 45:	10 AM – 11 AM	Introduction to attention models	Srinivasa A H
Lecture 46:	11 AM – 12 PM	Hyper Parameter Tuning - AutoML	Srinivasa A H
Lecture 47:	02 PM – 03 PM	Text Analysis - Sklearn & demo	Srinivasa A H
Lecture 48:	03 PM – 04 PM	Lab Session	Mr. Swamy T N
Day-13: 16th September 2021			
Lecture 49	10 AM – 11 AM	Text Analysis - Word2Vec & demo	Srinivasa A H
Lecture 50:	11 AM – 12 PM	Image - Yolo for object recognition & demo	Srinivasa A H
Lecture 51:	02 PM – 03 PM	Image - Object tracking & demo	Srinivasa A H
Lecture 52:	03 PM – 04 PM	Lab Session	Mr. Swamy T N
Day-14: 17th September 2021			
Lecture 53:	10 AM – 11 AM	Speech data & feature engineering, Speech data - Speaker recognition, Speech to text	Srinivasa A H
Lecture 54:	11 AM – 12 PM	Unsupervised Learning - K Means Clustering, Unsupervised Learning - Agglomerative Clustering and Dendrograms	Srinivasa A H
Lecture 55:	02 PM – 03 PM	Human Recognition with AI	Srinivasa A H

Dr. Ambedkar Institute of Technology, Bangalore
 Department of Electronics and Communication Engineering
**Future Skilled Program on Artificial Intelligence and Machine
 Learning (AI-ML)**
1st September – 18th September, 2021
 Work Done Statement

Lecture 56:	03 PM – 04 PM	Lab Session, Planning – MDP (Mini Project)	Ms. Shalini N
Day-15: 18th September 2021			
Lecture 57:	10 AM – 11 AM	AI in Wireless Communication	Srinivasa A H
Lecture 58:	11 AM – 12 PM	Classification using SVM	Srinivasa A H
Lecture 59:	02 PM – 03 PM	Applications Of Classification	Srinivasa A H
Lecture 60:	03 PM – 04 PM	Lab Session	Ms. Shalini N
4 PM - 5 PM VALIDICTORY			

Coordinators

1. Srinivas A. H
2. Swamy T. N
3. Shalini N

From 1st to 18th September 2021

Total Class Taken : 20

[illegible]

24	Puneeth n	1da19ec185	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
25	Aradhana.s	1DA20EC402	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	18
26	Kulal Uttam Rajendra	1DA18EC066	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
27	Aishwarya R D	1DA18CS010	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	18
28	DARSHAN V P	1DA19EC031	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
29	BHAVANA.T	1DA19EC024	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
30	Ruchitha B P	1DA19EC182	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
31	MOHAMMED OWAIS GOGI	1DA18CS087	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
32	Anitha G S	1DA18EC014	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
33	Likith R	1DA18CS073	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
34	Padma shree B H	1DA20EC413	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	A	P	P	P	18
35	NIKHIL V K	1DA18EC090	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
36	Kowsalya H T	1DA19EC416	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
37	UPENDRA	1DA19EC157	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
38	Vijaybhaskar T	1DA19EC163	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	19
39	Pavithra.S	1DA19EC097	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
40	MANJUNATHA GOWDA N	1DA18EC078	P	P	P	P	P	P	P	P	P	P	A	A	P	A	P	P	P	P	P	17
41	Kavyashree R	1DA19EC065	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
42	Vaijinath	1DA19EC160	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
43	Anish.N	1DA18CS016	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
44	Karthik Bhat Y	1DA18EC060	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
45	Chaithra HG	1DA19EC028	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
46	Likith kumar gowda	1DA18EC076	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
47	Yaseen Abdulajeej Nadaf	1DA18EI043	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
48	Radhika R	1DA19EC426	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
49	Kavita	1da18ec061	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
50	Prema Hanamanthray Patil	1DA19EC106	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
51	Nayana M	1DA19EC088	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
52	Vanlalrinchhana	1DA19EC161	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
53	Vijayalakshmi p	1DA19EC437	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
54	Shruti Channabasappa Lamani	1DA19CS422	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
55	mohnish s	1DA18EC081	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
56	Ashwini H K	1DA19EC020	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20

[illegible]

From 1st to 18th September 2021

Student Attendance list

Faculty Handled: Srinivas A H, Associate Professor, CSE, Dr.AIT

Total Class Taken : 20

[illegible]

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From 1st to 18th September 2021

Total Class Taken : 20

[illegible]

24	Puneeth n	1da19ec185	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
25	Aradhana.s	1DA20EC402	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	18
26	Kulal Uttam Rajendra	1DA18EC066	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
27	Aishwarya R D	1DA18CS010	P	P	P	P	P	P	P	P	P	P	P	P	P	P	A	A	P	P	P	18
28	DARSHAN V P	1DA19EC031	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
29	BHAVANA.T	1DA19EC024	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
30	Ruchitha B P	1DA19EC182	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
31	MOHAMMED OWAIS GOGI	1DA18CS087	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
32	Anitha G S	1DA18EC014	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
33	Likith R	1DA18CS073	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
34	Padma shree B H	1DA20EC413	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	A	P	P	P	18
35	NIKHIL V K	1DA18EC090	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
36	Kowsalya H T	1DA19EC416	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
37	UPENDRA	1DA19EC157	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
38	Vijaybhaskar T	1DA19EC163	P	P	P	P	P	P	P	P	P	P	P	P	P	A	P	P	P	P	P	19
39	Pavithra.S	1DA19EC097	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
40	MANJUNATHA GOWDA N	1DA18EC078	P	P	P	P	P	P	P	P	P	P	A	A	P	A	P	P	P	P	P	17
41	Kavyashree R	1DA19EC065	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
42	Vaijinath	1DA19EC160	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
43	Anish.N	1DA18CS016	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
44	Karthik Bhat Y	1DA18EC060	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
45	Chaithra HG	1DA19EC028	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
46	Likith kumar gowda	1DA18EC076	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
47	Yaseen Abdulajeej Nadaf	1DA18EI043	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
48	Radhika R	1DA19EC426	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
49	Kavita	1da18ec061	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
50	Prema Hanamanthray Patil	1DA19EC106	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
51	Nayana M	1DA19EC088	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
52	Vanlalrinchhana	1DA19EC161	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
53	Vijayalakshmi p	1DA19EC437	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
54	Shruti Channabasappa Lamani	1DA19CS422	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
55	mohnish s	1DA18EC081	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20
56	Ashwini H K	1DA19EC020	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	20

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About the Organization

Dr. Ambedkar Institute of Technology is managed by Panchajanya Vidya Peetha Welfare Trust (Regd.) was established by Late Sri. M.H.Jayprakash Narayan in 1979. The institute is affiliated to Visvesvaraya Technological University (VTU), Belgaum and is accredited by AICTE. The institution has been accredited by National Board of Accreditation (NBA), New Delhi. The institute has been accredited by NAAC with 'A' Grade and is mentee institute for Institution of Engineering & Technology, Dr. Ram Manohar Lohia Avadh University, Faizabad, Uttar Pradesh. Most of the programmes are accredited by NBA. Apart from 10 disciplines of Engineering, the institute also offers MCA, MBA and M. Tech. Programs in various specializations. The institute is one among the 14 colleges selected for receiving the World Bank assistance under the Technical Education Quality Improvement Programme (TEQIP) through the government of India.

Click below link

<https://forms.gle/eLHHfhtFXkXcQA7P9>

OR

Scan this QR code for registration



About the Training

“Imparts knowledge about basics related to industrial robots for their control, design and application in robotics & automation Industries, which is one of the expected areas to have huge employment potential for engineering graduates in coming years”

Training Objectives

- + Design of Robots using mathematical modeling
- + Development of mobile robots using Arduino
- + Use of Open-source Softwares

Training Outcomes

- + Perform kinematic and dynamic analyses with simulation
- + Design control laws for a simple robot.
- + Integrate mechanical & electrical hardware for a real prototype of robotic device.
- + Select a robotic system for given industrial application.

Training Coordinators

- Mr. Mohan Kumar V, Asst. Prof., Dept. of ECE
ph:+91 8884660123
- Mrs. Kesthara V, Asst. Prof., Dept. of ECE
- Mr. Mudhusudhan, Asst. Prof., Dept. of ECE
- Mr. Anand H D, Asst. Prof., Dept. of ECE
- Mrs. Vidyashree C, Asst. Prof., Dept. of ECE



Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

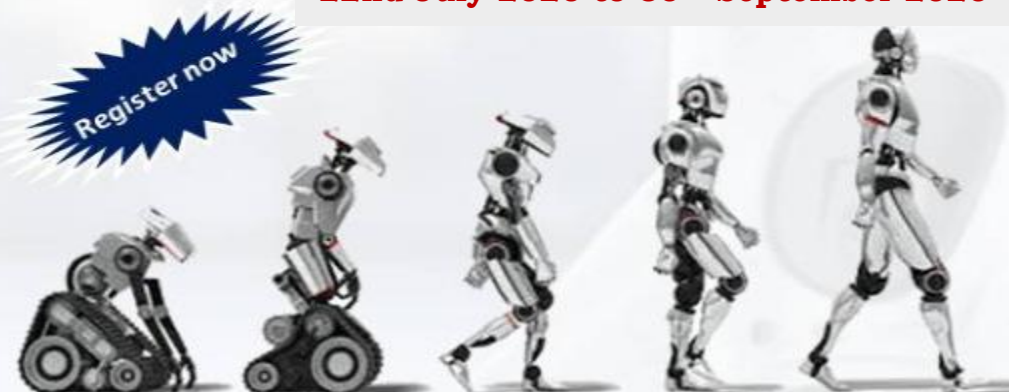
BDA Outer Ring Road, Mallathalli, Bengaluru-56



TEQIP Assisted
Online Student Training on
Future Skill Technologies

ROBOTICS & AUTOMATION

22nd July 2020 to 30th September 2020



Instructions for participants:

❖ The training of students shall be conducted during July – Sept 2020.

❖ Students may be allowed for necessary lab work / hands-on practice after lockdown in batches of appropriate size while following strict safety protocols and practicing social distancing.

❖ The students shall undergo formative progress review test conducted by NASSCOM midway during the training program.

❖ Post training assessment and certification shall be conducted through SSC NASSCOM after the training.

Topics to be Covered:

1. Introduction to Robotics
2. Robot Kinematics and Dynamics
3. Sensors
4. Robot Actuation Systems
5. Robot Control
6. Control Hardware and Interfacing
7. AI in Robotics.
8. Robotics and Automation for Industry 4.0
9. Robot safety and social robotics.
- 10, *Practical sessions will be on Robot design & simulation open source softwares*

Pre-requisites:

- Calculus and linear algebra
- Basic Electrical Engineering
- Control System
- Embedded System & HDL

Who can Register?

This is an Interdisciplinary course, so students from all branches of final semester can register

❖ *The course will be conducted for 2 hours daily from Monday to Friday.*

❖ *Proctored exam will be conducted during midway (2nd week of august) and at the end of course*

❖ *Sessions will be conducted through online mode and learning management system(LMS)*

❖ *Assignment and practice quiz will be given after every session*

❖ *Register as soon as possible as the number of participants is limited*

LIST OF PRACTICALS (FOCUSSED ON INDUSTRIAL ROBOTICS)

1. Study components of an industrial robot (PUMA, KUKA, FANUC, MTAB, UR, Etc) and its DH parameters / Simpler laboratory version of robotic arm having 4 or 5 DOF.
2. Forward kinematics and validation using a software (Robo Analyser/MathLab or any other free software tool).
3. Inverse kinematics of an industrial robot and validation using any open source software./ Simpler laboratory version of robotic arm.
4. Industrial Robot programming using VAL II or equivalent / simpler laboratory version of robotic arm.
5. Microcontroller lab – programming (free software /open source)
6. Integration of assorted sensors (IR, Potentiometer, strain gages etc.), micro controllers and ROS (Robot Operating System) in a robotic system. (Free software, Matlab)
7. Control experiment using available hardware or software. (Open source or Matlab).
8. Use of open source computer vision programming tool/ MatLab, open CV.
9. Research related experiment in AI, e.g. multi agent system, unmanned systems control using ROS, etc.
10. Small group project work relevant to Industrial automation.

Text Books to be followed:

- Introduction to Robotics : J. Craig , Pearson
- Robot Dynamics and Control, Spong & Vidyasagar, Mc Graw Hill
- Robotics Engineering : R. Klafater, PHI
- Robotics : Subir K Saha , Mc GrawHill
- Industrial Robotics : M. P. Groover, Ashish Dutta , McGraw Hill

Syllabus : Robotics and Automation

ROBOTICS AND AUTOMATION

OBJECTIVE

The objective of this course is to impart knowledge about basic mathematics related to industrial robots for their control, design and application in robotics & automation Industries.

LEARNING OUTCOMES

After the completion of this course, the students will be able to:

- Perform kinematic and dynamic analyses with simulation.
- Design control laws for a simple robot.
- Integrate mechanical and electrical hardware for a real prototype of robotic device.
- Select a robotic system for given industrial application.

DETAIL CONTENTS

1. Introduction to Robotics

- 1.1 Types and components of a robot, Classification of robots,
- 1.2 Kinematics systems; Definition of mechanisms and manipulators, Degrees of Freedom

2. Robot Kinematics and Dynamics

- 2.1 Kinematic Modelling: Translation and Rotation Representation, Coordinate transformation, DH parameters, Forward and inverse kinematics, Jacobian, Singularity, and Statics
- 2.2 Dynamic Modelling: Forward and inverse dynamics, Equations of motion using Euler-Lagrange formulation, Newton Euler formulation

3. Sensors

- 3.1 Sensor: Contact and Proximity, Position, Velocity, Force, Tactile

- etc.
- 3.2 Introduction to Cameras, Camera calibration,
- 3.3 Geometry of Image formation, Euclidean/Similarity/Affine/Projective transformations
- 3.4 Vision applications in robotics.

4. Robot Actuation Systems

5.1 Actuators: Electric, Hydraulic and Pneumatic; Transmission: Gears, Timing Belts and Bearings, Parameters for selection of actuators.

5. RobotControl

- 5.1 Basics of control: open loop- closed loop, Transfer functions, Control laws: P, PD, PID
- 5.2 Linear and Non-linear controls

6. Control Hardware and Interfacing

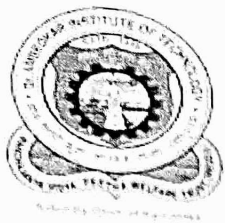
6.1 Embedded systems : Microcontroller Architecture and integration with sensors, actuators, components, Programming Applications for Industrial robot - programming in – VAL II

7. AI in Robotics : Applications in unmanned systems, defense, medical, industries, etc.

8. Robotics and Automation for Industry 4.0

9. Robot safety and social robotics.

Note: Involvement of Robotics industries so that the faculty are aware of what is essential when their students apply for industrial jobs. Industries in India dealing with industrial robots are PARI, MTAB, SystemAntics, Motoman, FANUC, KUKA, UR and they would be involved in delivering expert industry lectures.



NPIU

National Project Implementation Unit

Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathalli, Bengaluru-56
Dept. of Electronics and Communication Engineering

TEQIP Assisted

Online Student Training on Future Skill Technologies

“Robotics & Automation”

22nd July 2020 to 17th January 2021

DETAIL REPORT

TEQIP Assisted Online Student Training on Future Skill Technologies **“Robotics & Automation”** was organized for Interested Students of all branches of Dr. AIT of all branches from 22/07/2020 to 17/01/2021 coordinated by **Mohan Kumar V, Kesthara V, Madhusudhan M, Anand H D and Vidyashree C**, Assistant Professors, Dept. of ECE, Dr. AIT

The participants for this training program were 50 Students from different branches like Computer Science and Engineering, Electronics and Communication Engineering, Electronics and Instrumentation Engineering, Information Science and Engineering and Mechanical Engineering of Dr. AIT, Bengaluru.

Resource persons were **Mohan Kumar V**, Assistant Professor, Dept. of ECE, Dr. AIT who was trained at IIT Roorkee, **Kesthara V, Madhusudhan M and Anand H D**, Assistant Professors, Dept. of ECE, Dr. AIT who were trained at IIT Madras and **Vidyashree C**, Assistant Professor, Dept. of ECE, Dr. AIT who was trained at IIT-Gurgaon

The training program was formally inaugurated in Online mode on 22nd July 2020 in the presence of **Dr. Mahalinga V Mandi**, Dean (Planning & Development), TEQIP III coordinator Dr A.I.T, Coordinators and Participants.

The inaugural session also included Key note address by **Dr. Pushparaj Mani Pathak**, Professor, Mechanical & Industrial Engineering Department, IIT Roorkee where in participants were provided the introduction to Robotics and Automation, their configurations and Robotic applications.

The successive session was handled by Mohan Kumar V, Assistant Professor, Dept. of ECE, Dr. AIT, who provided the overview of course and details of successive sessions regularly handled by respective training faculty are as follow:

Session No.	Date & Time	Session Handled by	Topics covered
1.	23.07.2020 11:30 AM- 12:30 PM	Mohankumar V.	Introduction Part-I
2.	23.07.2020 12:30 PM- 1:30 PM	Anand H D	Introduction part-II
3.	24.07.2020 11:30 AM- 12:30 PM	Anand H D	Introduction part-III
4.	24.07.2020 12:30 PM - 01:30 PM		
5.	25.07.2020 10:00 AM - 11:00 AM	Mohankumar V.	Spatial Descriptions
6.	25.07.2020 11:00 AM- 12:00 PM		
7.	26.07.2020 10:00 AM- 11:00 PM	Mohankumar V.	Spatial Transformation
8.	26.07.2020 11:00 AM - 12:00 PM		
9.	27.07.2020 05:00 PM - 06:00 PM	Mohankumar V.	Representation of Angles
10.	27.07.2020 06:00 PM - 07:00 PM		
11.	28.07.2020 10:30 AM - 11:30 AM	Vidyashree C	Forward kinematics
12.	28.07.2020 11:30 AM - 12:30 PM		
13.	29.07.2020 05:00 PM - 06:00 PM	Vidyashree C	Forward kinematics
14.	29.07.2020 06:00 PM - 07:00 PM		
15.	02.08.2020 09:30 AM - 10:30 AM	Vidyashree C	Inverse kinematics
16.	02.08.2020 10:30 AM - 11:30 AM		
17.	03.08.2020 09:00 AM - 10:00 AM	Vidyashree C	Inverse kinematics
18.	03.08.2020 10:00 AM - 11:00 AM		
19.	04.08.2020 10:30 AM - 11:30 AM	Vidyashree C	Inverse kinematics
20.	04.08.2020 11:30 AM - 12:30 PM		
21.	06.08.2020 05:00 PM - 06:00 PM	Vidyashree C	Jacobian

44.	23.08.2020 10:00 AM- 11:00 AM		
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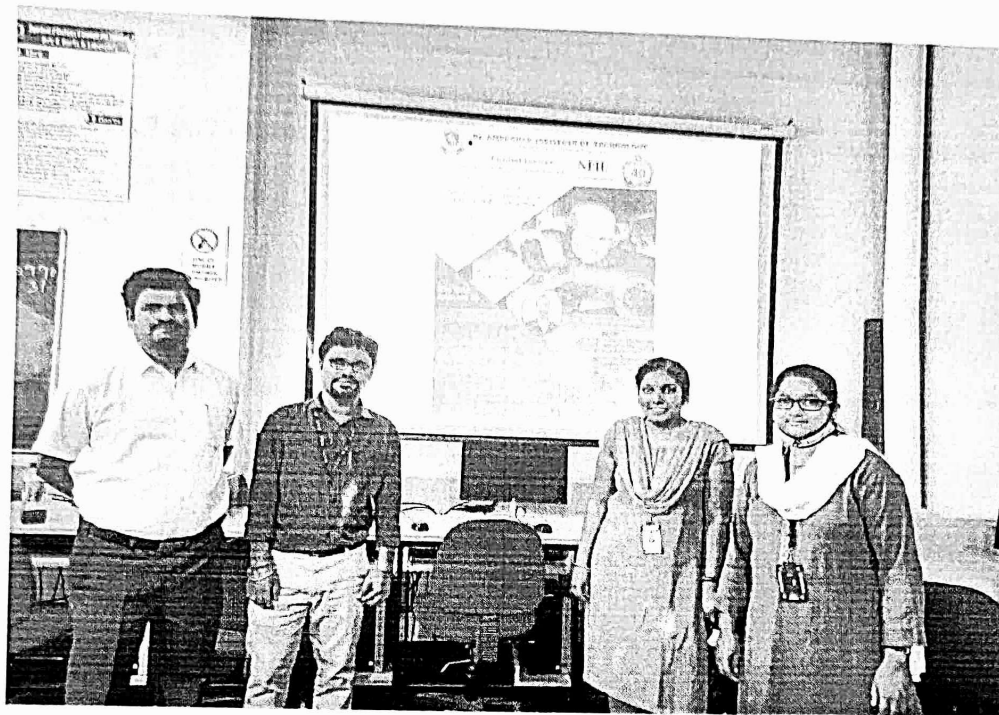
Mid-Training assessment of students on Future Skill technologies through NASSCOM SSC was carried out on 24th August 2020 and around 40 participants appeared for the exam.

Then respective training faculty continued to handle sessions, whose details are as follow

Session No.	Date & Time	Session Handled by	Topics covered
45.	25.08.2020 05:00 PM- 06:00 PM	Kesthara V	Linear Control of Manipulators Part-II Non-Linear Control of Manipulators Part-I
46.	25.08.2020 06:00 PM- 07:00 PM		
47.	26.08.2020 05:00 PM- 06:00 PM	Kesthara V	Non-Linear Control of Manipulators Part-II
48.	26.08.2020 06:00 PM- 07:00 PM		
49.	27.08.2020 05:00 PM- 06:00 PM	Kesthara V	Linear Control of Manipulators Part-II Non-Linear Control of Manipulators Part-I
50.	27.08.2020 06:00 PM- 07:00 PM		
51.	29.08.2020 05:00 PM- 06:00 PM	Kesthara V	Non-Linear Control of Manipulators Part-II
52.	29.08.2020 06:00 PM- 07:00 PM		
53.	03-09-2020 05:00 PM- 06:00 PM	Madhusudhan M	Robotics and Automation for Industry 4.0
54.	03-09-2020 06:00 PM- 07:00 PM		
55.	05-09-2020 05:00 PM - 06:00 PM	Anand H D	Embedded Systems
56.	05-09-2020 06:00 PM - 07:00 PM		
57.	06-09-2020 03:00 PM- 05:00 PM	Madhusudhan M	Robotics safety and social Robots
58.	06-09-2020 04:00 PM- 05:00 PM		
59.	03-01-2021 4:00 PM- 5:00 PM	Anand H D	Artificial Intelligence
60.	03-01-2021 6:00 PM- 7:00 PM		

22.	06.08.2020 06:00 PM - 07:00 PM		
23.	07.08.2020 09:30 AM - 10:30 AM	Vidyashree C	Dynamics
24.	07.08.2020 10:30 AM - 11:30 AM		
25.	08.08.2020 10:30 AM - 11:30 AM	Vidyashree C	Dynamics
26.	08.08.2020 11:30 AM - 12:30 PM		
27.	09.08.2020 10:30 AM - 11:30 AM	Vidyashree C	Dynamics
28.	09.08.2020 11:30 AM - 12:30 PM		
29.	10-08-2020 05:00 PM - 06:00 PM	Anand H D	Sensors-I
30.	10-08-2020 06:00 PM - 07:00 PM		
31.	12-08-2020 05:00 PM- 06:00 PM	Madhusudhan M	Actuators
32.	12-08-2020 06:00 PM - 07:00 PM		
33.	13-08-2020 05:00 PM - 06:00 PM	Anand H D	Sensors-II
34.	13-08-2020 06:00 PM - 07:00 PM		
35.	16-08-2020 05:00 PM- 06:00 PM	Madhusudhan M	Problems on Actuators
36.	16-08-2020 06:00 PM- 07:00 PM		
37.	17-08-2020 05:00 PM- 06:00 PM	Madhusudhan M	Manipulator Mechanism Design
38.	17-08-2020 06:00 PM- 07:00 PM		
39.	18-08-2020 05:00 PM- 06:00 PM	Madhusudhan M	Manipulator Mechanism Design
40.	18-08-2020 06:00 PM- 07:00 PM		
41.	20-08-2020 05:00 PM- 06:00 PM	Kesthara V	Linear Control of Manipulators Part-1
42.	20-08-2020 06:00 PM- 07:00 PM		
43.	23.08.2020 09:00 AM- 10:00 AM	Mohankumar V.	Revision of module-1

Finally on 17th January 2021 Post-training assessment of students was conducted through NASSCOM SSC and 37 participants attended the exam, with this training program was successfully completed.



Pic. 1: Coordinators/ Faculty Trainers of Robotics and Automation Training Program during Inauguration of Training Program



Pic. 2: Coordinators/ Faculty Trainers of Robotics and Automation Training Program with Dr. Mahalinga V Mandi, Dean (Planning & Development), TEQIP III coordinator Dr A.I.T during Inauguration of Training Program

Training on Future Skills Technology

Robotics and Automation

TENTATIVE SCHEDULE

From 22.07.2020 to 06.09.2020

Time: 10.00 AM to 12.00 NOON (Online Mode)

Date	Topic	Trainer			
22.07.2020 Wednesday	Inauguration	Principal and HOD	Wednesday	Jacobians: Velocities and Forces Part-II Quiz(15 minutes)	
	Key Note Address	Dr. Pushparaj Mani Pathak IIT- Roorkee	06.08.2020 Thursday	Numerical on Jacobians Quiz(30 minutes)	VC
23.07.2020 Thursday	Introduction to Robotics	MKV	07.08.2020 Friday	Manipulator Dynamics Part-I Quiz(15 minutes)	VC
	Industrial Robotics	AHD	08.08.2020 Saturday	Manipulator Dynamics Part-II Quiz(15 minutes)	VC
24.07.2020 Friday	Spatial Descriptions Quiz(15 minutes)	MKV	09.08.2020 Sunday	Numerical on Manipulator Dynamics Quiz(30 minutes)	VC
25.07.2020 Saturday	Spatial Transformation Quiz(15 minutes)	MKV	10.08.2020 Monday	Sensors Part-I Quiz(15 Minutes)	AHD
26.07.2020 Sunday	Numerical on Spatial transformation Quiz(30 minutes)	MKV	11.08.2020 Tuesday	Sensors Part-II Quiz(15 Minutes)	AHD
27.07.2020 Monday	Manipulator Kinematics Part-I Quiz(15 minutes)	MKV	12.08.2020 Wednesday	Actuators Quiz(15 Minutes)	MM
28.07.2020 Tuesday	Manipulator Kinematics Part-II Quiz(15 minutes)	MKV	13.08.2020 Thursday	Trajectory Generation Part-I Quiz(15 minutes)	AHD
29.07.2020 Wednesday	Numerical on Manipulator Kinematics Quiz(30 minutes)	MKV	14.08.2020 Friday	Trajectory Generation Part-II Quiz(15 minutes)	AHD
30.07.2020 Thursday	Manipulator Inverse Kinematics Part-I Quiz(15 minutes)	VC	15.08.2020 Saturday	Numerical on Trajectory Generation Quiz(30 minutes)	AHD
02.08.2020 Sunday	Manipulator Inverse Kinematics Part-II Quiz(15 minutes)	VC	16.08.2020 Sunday	Manipulator Mechanism Design Part-I Quiz(15 minutes)	MM
03.08.2020 Monday	Numerical on Inverse Manipulator Kinematics Quiz(30 minutes)	VC	17.08.2020 Monday	Manipulator Mechanism Design Part-II Quiz(15 minutes)	MM
04.08.2020 Tuesday	Jacobians: Velocities and Forces Part-I Quiz(15 minutes)	VC	18.08.2020 Tuesday	Numerical on Manipulator Mechanism Design	MM
05.08.2020		VC			

	Quiz(30 minutes)	
19.08.2020 Wednesday	Formative Midterm Assessment	--
20.08.2020 Thursday	Linear Control of Manipulators Part-I Quiz(15 minutes)	KV
21.08.2020 Friday	Linear Control of Manipulators Part-II Quiz(15 minutes)	KV
23.08.2020 Sunday	Numerical on linear control of Manipulators Quiz(30 minutes)	KV
24.08.2020 Monday	Non-Linear Control of Manipulators Part-I Quiz(15 minutes)	KV
25.08.2020 Tuesday	Non-Linear Control of Manipulators Part-II Quiz(15 minutes)	KV
26.08.2020 Wednesday	Numerical on Non-linear control of Manipulators Quiz(30 minutes)	KV
27.08.2020 Thursday	Force Control of Manipulators Part-I Quiz(15 minutes)	KV
28.08.2020 Friday	Force Control of Manipulators Part-II Quiz(15 minutes)	KV
		KV

29.08.2020 Saturday	Numerical on Force Control of Manipulators Quiz(30 minutes)	
30.08.2020 Monday	Embedded Systems Part-I Quiz(15 minutes)	AHD
31.08.2020 Monday	Embedded Systems Part-II Quiz(15 minutes)	AHD
01.09.2020 Tuesday	Image Processing & Mission Vision Quiz(15 minutes)	AHD
02.09.2020 Wednesday	Artificial Intelligence in Robotics Quiz(15 minutes)	VC
03.09.2020 Thursday	Robotics and Automation for Industry 4.0. Quiz(15 minutes)	MM
04.09.2020 Friday	Open Source Software Quiz(15 minutes)	MKV
05.09.2020 Friday	Open Source Software Quiz(15 minutes)	AHD
06.09.2020 Saturday	Robotics Safety and social robots Quiz(15 minutes)	MM
	Feedback session and Valedictory	Principal and HOD
2 nd Week of September	Post Training Assessment	--

NOTE: Practical Sessions will be conducted during the regular theoretical sessions.

List of Trainers

1	MKV Mohakumar V. Assistant Professor Dept. of ECE, Dr.AIT, Bengaluru-56.
2	KV Kestara V. Assistant Professor Dept. of ECE, Dr.AIT Bengaluru-56.

3	HDA H.D.Anand Assistant Professor Dept. of ECE, Dr.AIT Bengaluru-56.
4	VC Vidyashree C. Assistant Professor Dept. of ECE, Dr.AIT Bengaluru-56.
5	MM Madhusudhan M. Assistant Professor Dept. of ECE, Dr.AIT Bengaluru-56.

Dr. Ambedkar Institute of Technology, Bengaluru-56
(An Autonomous Institution Affiliated to VTU, Belagavi)
Training on Future Skills Technology: Robotics and Automation
Attendance of Students for Classes Handled by VIDYASHREE C

Sl. No.	Student Name	USN	29-07-2020	30-07-2020	02-08-2020	03-08-2020	04-08-2020	06-08-2020	07-08-2020	08-08-2020	09-08-2020
			10.30-12.30	5.00-7.00	9.30-11.30	9.00-11.00	10.30-12.30	5.00-7.00	9.30-11.30	10.30-12.30	10.30-12.30
1	1DA17CS026	Bhavani T R	1	2	3	4	5	6	7	8	9
2	1DA17CS039	DARSHAN H K	1	2	3	4	5	6	7	8	9
3	1DA17CS048	GAGANA S N	1	2	2	3	4	5	6	7	8
4	1DA17CS055	HEMALATHA.M	1	2	3	4	5	6	7	7	8
5	1DA17CS056	HEMARAJ	1	2	3	4	5	6	7	8	9
6	1DA17CS059	JHANAVLR	1	2	3	4	5	6	7	7	8
7	1DA17CS073	MAHAMMEDANSAR Y	1	2	3	4	5	6	7	8	9
8	1DA17CS142	ROOPESH KUMAR C K	0	2	3	4	5	6	7	8	9
9	1DA18CS420	POOJA VASANTH	1	2	3	4	5	6	7	7	8
10	1DA18CS424	SARASWATHI M	1	2	3	4	5	6	7	8	9
11	1DA18CS425	SHANMUKHA TIMMAPP	1	2	3	4	5	6	7	8	9
12	1DA15EC148	SUHAS S KASHYAP	1	2	3	4	4	5	6	7	8
13	1DA16EC040	Harshitha G V	1	2	3	4	5	6	7	8	9
14	1DA17EC018	ASHWINI H	1	2	3	4	5	6	7	8	9
15	1DA17EC021	CHINMAYEE B H	1	2	3	4	5	6	7	7	8
16	1DA17EC027	Chandan S	1	2	3	4	5	6	7	8	9
17	1DA17EC028	CHANDANASHREE.A	1	2	3	4	5	6	7	8	9
18	1DA17EC037	Divya	1	2	3	4	5	6	7	7	8
19	1DA17EC041	GAJANAN R SHANBHAG	1	2	3	4	5	6	7	8	9
20	1DA17EC042	GAURAV N KAWALE	1	2	3	4	5	6	7	8	9
21	1DA17EC052	JYESHTA BABU SUYOG	1	2	3	4	5	6	7	8	9
22	1DA17EC071	M R SRI VANI	1	2	3	4	5	6	6	7	8
23	1DA17EC077	MANSOOR PASHA	1	2	3	4	5	6	7	8	9
24	1DA17EC078	MEGHANA C	1	2	3	4	5	6	7	8	8
25	1DA17EC082	NANDINI N	1	2	3	4	5	6	7	8	9
26	1DA17EC086	NISCHITHA V	1	2	3	4	5	6	7	8	9
27	1DA17EC136	SRINIDHI K S	1	2	3	4	4	5	6	7	8
28	1DA17EC145	ULLAS K	1	2	3	4	5	6	7	8	9
29	1DA17EC148	Veekshith R	1	2	3	4	5	6	7	8	9
30	1DA18EC425	Nikhil Reddy G	1	2	3	4	5	6	7	8	9
31	1DA18EC428	POOJA R ITI	1	2	3	4	5	6	7	8	9
32	1DA17E1007	ANUSHA BALEHOLA	1	2	3	4	5	6	7	8	8
33	1DA17E1008	Anusha U.N	1	2	3	4	5	6	7	8	9
34	1DA17E1011	Bhuvan M	1	2	3	4	5	6	7	8	9
35	1DA17E1012	Chaitra Shree	1	2	3	4	5	6	7	8	9
36	1DA17E1015	G Rashmi	1	2	3	4	5	6	7	8	9
37	1DA17E1016	Greeshma G	1	2	3	4	5	6	7	8	9
38	1DA17E1017	HARIKA PABBATHI	1	2	3	4	5	6	7	8	9
39	1DA17E1022	JAVASHREE V	1	2	3	4	5	5	6	7	8
40	1DA17E1023	KAVITHA R	1	2	3	4	5	6	7	8	9
41	1DA17E1025	MANORITHA A	1	2	3	4	4	5	6	7	8
42	1DA17E1028	MOHITH PRAJWAL M	1	2	3	4	5	6	7	8	9
43	1DA17E1031	Payal S P	1	2	3	4	5	6	7	8	9
44	1DA17E1038	Sachin Kini N.	1	2	3	4	5	6	7	8	9
45	1DA17E1042	SHRUSTI CHAVAN V	1	2	3	4	5	6	7	8	9
46	1DA17E1046	SUSHMA K S	1	2	3	4	4	5	6	7	8
47	1DA17E1051	YASHASWINI R	1	2	3	4	5	6	7	8	8
48	1DA17IS012	HARSHA CHOUDHARY	1	2	3	4	5	6	7	8	8
49	1DA17ME146	SHRINIVAS FADNIS	1	2	3	4	5	6	7	8	9
50	1DA17ME151	SUNIL PALM	1	2	3	4	5	6	7	8	9



DR. AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer ring road, Mallathalli, Bengaluru-56



**TEQIP
Assisted Training
on Future Skill
Technologies**

CYBER SECURITY

**Certification by:
NASSCOM**

Start From: 20 July 2020

Duration: 2 Months

**Course Type: Online
Webinar**

**Scan
and Register**



Post training assessment
and certification shall be
conducted through
SSC NASSCOM

Course Contents

- Fundamentals of Computer Networks
- Network Layers, Protocols
- Cyber Security Vulnerabilities
- Cryptography, Firewalls and Malware
- Cyber Security management
- Web Services and Cyber Laws

Course Objectives

- To impart necessary knowledge to establish a solid understanding of the Cyber Security environment
- To provide opportunities of academic pursuits to students to improve their knowledge as a life-long activity

TEQIP-3

Chief Convener

Dr. C Nanjundaswamy
Principal, Dr. AIT, Bangalore.

Convener

Dr. Mahalinga V Mandi
Dean (Planning and Development) and
TEQIP-III Coordinator, Dr. AIT.

Course Facilitator and Coordinator

Dr. Yamuna Devi, Asso. Prof./HOD, TE., Dr. AIT. 9886716525
Dr. Mary Cherian, Prof. CSE., Dr. AIT. 9986885560
Ms. Nithyashree S, Asst. Prof. ECE., Dr. AIT. 812396980
Ms. Spoorthi P A, Asst. Prof. ECE., Dr. AIT. 9035286400
Mr. Sujay S N, Asst. Prof. ECE., Dr. AIT. 9886991995

Course Outcomes

- Demonstrate understanding of basic networking and network security concepts needed for cyber security.
- Apply the cyber security knowledge to build models to prevent cyber attacks.
- Build an understanding of cyber laws and cyber security management.

Scan
and Register



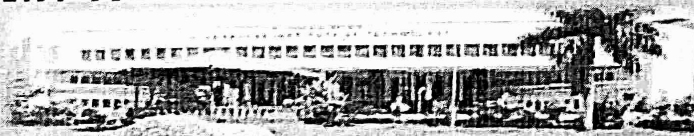
<https://forms.gle/yo5fn3mg3bHGDXMGA>

Registration Fee:

✓ FREE for students of Dr. AIT.

Who can participate?

✓ Students from any branch of Engineering
can participate in the course



Dr. Ambedkar Institute of Technology

Details of Registered Students for Cyber Security Course

Course: Cyber Security

Sl.No	Email	NAME	USN	DEPARTMENT	SEMESTER	COTACT NO.	GENDER	DATE OF BIRTH
1	aditya.monika55@gmail.com	Aditya Tiwari	1DA17IS002	Information Science Engineering	BE 6th sem	9108596165	Male	5/5/1999
2	akshayakumar1811@gmail.com	Akshaya K	1DA17CS010	Computer Science Engineering	BE 6th sem	8310103993	Female	8/24/1999
3	mayuraamogha19@dr-ait.org	Amogha S	1DA17CS013	Computer Science Engineering	BE 6th sem	8951338715	Male	3/1/1999
4	anagha.melepat@gmail.com	Anagha Ajoykumar	1DA17CS014	Computer Science Engineering	BE 6th sem	8277095695	Female	9/20/1999
5	anandanagha2@gmail.com	Anagha Anand	1DA17EC011	Electronics and Communication Engineering	BE 6th sem	8073643214	Female	9/1/1999
6	anupama1202@gmail.com	ANUPAMA A S	1DA18CS019	Computer Science Engineering	BE 4th sem	9380688630	Female	2/12/2000
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9	chandanak157@gmail.com	Chandana K	1DA17CS034	Computer Science Engineering	BE 6th sem	9.1866E+11	Female	4/15/1999
10	srujangowda66@gmail.com	D M SRUJAN GOWDA	1DA17EC137	Electronics and Communication Engineering	BE 6th sem	6362881850	Male	5/10/1999
11	darshancr58@gmail.com	Darshan C R	1DA18EC410	Electronics and Communication Engineering	BE 6th sem	9964182058 (or) 7676656210	Male	3/2/2000
12	darshithsuresh2001@gmail.com	Darshith.S	1DA19IS010	Information Science Engineering	BE 2nd Sem	7349546760	Male	10/31/2001
13	deepaksr.dsr@gmail.com	Deepak S R	1DA18CS044	Computer Science Engineering	BE 4th Sem	9535577222	Male	4/24/2000
14	surendrasindhu7@gmail.com	JAYAM SURENDRA SINDHU	1DA17CS058	Computer Science Engineering	BE 6th sem	9182766754	Female	7/23/2000
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16	kavitaprabhu1999@gmail.com	Kavita Nagaraj Prabhu	1DA18TE015	Telecommunication Engineering	BE 4th Sem	9986242310	Female	9/1/1999
17	Kavyatejas1997@gmail.com	KAVYA H C	1DA18EC415	Electronics and Communication Engineering	BE 6th sem	9108298422	Female	6/1/1997
18	kavyapn789@gmail.com	Kavya PN	1DA18EC416	Electronics and Communication Engineering	BE 6th sem	9483685748	Female	8/8/1999
19	kavyav864@gmail.com	Kavya. V	1DA19IS016	Information Science Engineering	BE 2nd Sem	7259632847	Female	11/16/2000
20	kirankumarbm007@gmail.com	Kirankumar B M	1da18ec417	Electronics and Communication Engineering	BE 6th sem	9663647570	Male	10/23/1999
21	lavanya.venkatesh1999@gmail.com	Lavanya V	1DA18CS413	Computer Science Engineering	BE 6th sem	8050248210	Female	6/10/1999
22	mlakesha2@gmail.com	Lokesha	1DA19EI407	Electronics and Instrumentation Engineering	BE 4th Sem	8151809213	Male	6/11/1999
23	manojgowdago@gmail.com	Manoj R	1DA17EC076	Electronics and Communication Engineering	BE 6th sem	9035225281	Male	5/22/1999
24	muskansultanamussu2006@gmail.com	Muskan sultana	1DA19IS022	Information Science Engineering	BE 2nd Sem	9741763715	Female	6/20/2001
25	medhinisampemane@gmail.com	Medhini Sampemane	1DA19IS021	Information Science Engineering	BE 2nd Sem	9108850764	Female	12/15/2000
26	namitharao1999@gmail.com	Namitha Rao	1DA17CS089	Computer Science Engineering	BE 6th sem	8317356957	Female	7/3/1999
27	nikit24111999@gmail.com	Nikita Ashok Shet	1DA17CS095	Computer Science Engineering	BE 6th sem	9113568498	Male	10/30/2000
28	paavanikomarla@dr-ait.org	Paavani Komarla	1DA17CS103	Computer Science Engineering	BE 6th sem	8861659494	Female	9/11/1999
29	poojabanavaras123@gmail.com	Pooja BS	1DA17CS108	Computer Science Engineering	BE 6th sem	9513025727	Female	12/26/1999
30	poojahamsa99@gmail.com	Pooja yadav P N	1DA18EC429	Electronics and Communication Engineering	BE 6th sem	7349456068	Female	12/30/1999
31	poojit.chowdry@gmail.com	Poojit Chowdry	1DA17CS110	Computer Science Engineering	BE 6th sem	9910043651	Male	11/5/1998

32	prajwalbandipraj113@gmail.com	Prajwal	1DA18TE028	Telecommunication Engineering	BE 4th Sem	7829231037	Male	11/23/2000
33	pkohli515@gmail.com	PRASHANT	1DA18EC432	Electronics and Communication Engineering	BE 6th sem	7353666871	Male	12/1/1997
34	raj476ec@gmail.com	Prashanth Raj C S	1da18ec433	Electronics and Communication Engineering	BE 6th sem	8496011255	Male	6/21/1999
35	pratheepkumarnm26@gmail.com	PRATHEEPKUMAR NM	1DA18EC434	Electronics and Communication Engineering	BE 6th sem	9019699325	Male	9/22/1999
36	happysaint85@gmail.com	Pratik Sharma	1DA17CS117	Computer Science Engineering	BE 6th sem	8073413373	Male	2/23/2000
37	preranavshetty27@gmail.com	PRERANA V	1DA19IS025	Information Science Engineering	BE 2nd Sem	9986499325	Female	6/27/2001
38	prithvibadekkila1@gmail.com	Prithvi B	1DA17EC102	Electronics and Communication Engineering	BE 6th sem	9741017811	Male	8/28/1999
39	rajajalakshmi39@gmail.com	Rajalakshmi N N	1DA19CS119	Computer Science Engineering	BE 2nd Sem	8884628299	Female	12/1/2002
40	rakshahande@gmail.com	Raksha S Hande	1DA17CS131	Computer Science Engineering	BE 6th sem	9481659342	Female	10/12/1998
41	rakshithkumar13sept@gmail.com	RAKSHITH J	1DA17EC113	Electronics and Communication Engineering	BE 6th sem	9483449164	Male	9/13/1999
42	rashmimn42@gmail.com	Rashmi MN	1DA19IS030	Information Science Engineering	BE 2nd Sem	9483605430	Female	10/30/2000
43	raochreshma@gmail.com	RESHMA RAO C H	1DA19IS031	Information Science Engineering	BE 2nd Sem	7022459486	Female	9/22/2001
44	roopashree7839@gmail.com	Roopashree B R	1DA17EC117	Electronics and Communication Engineering	BE 6th sem	9113895158	Female	8/4/1999
45	iamsachi10@gmail.com	SACHIN B	1DA18EC438	Electronics and Communication Engineering	BE 6th sem	9535332975	Male	3/18/1999
46	sandhyamvkadur@gmail.com	Sandhya M V	1DA17EC121	Electronics and Communication Engineering	BE 6th sem	9663222804	Female	8/16/1999
47	sharath.h.s.143@gmail.com	Sharath kumara H S	1DA18EC441	Electronics and Communication Engineering	BE 6th sem	7676122709	Male	8/11/1996
48	senhilanand29@gmail.com	SENTHILANAND P	1DA17CS153	Computer Science Engineering	BE 6th sem	8971628295	Male	11/9/1999
49	shashank09111999@gmail.com	SHASHANK B	1DA17EC126	Electronics and Communication Engineering	BE 6th sem	7411715223	Male	5/25/1999
50	shashankbbaragur@gmail.com	Shashank b baragur	1DA17EC127	Electronics and Communication Engineering	BE 6th sem	9738614662	Male	3/3/2000
51	shashibgs64@gmail.com	Shashi Kumar S	1DA18EC442	Electronics and Communication Engineering	BE 6th sem	9206561525	Female	11/14/1999
52	shravyamsgowda@gmail.com	Shravya MS	1DA17CS201	Computer Science and Engineering	BE 6th sem	7892799708	Female	6/17/1999
53	176shruti@gmail.com	SHRUTI	1DA17CS160	Computer Science Engineering	BE 6th sem	9164446481	Female	2/15/1999
54	shilpa1999.mohan@gmail.com	Shilpa M	1DA17EC129	Electronics and Communication Engineering	BE 6th sem	8618486135	Male	4/16/1999
55	srikanthrv1999@gmail.com	Srikanth R V	1DA17EC162	Electronics and Communication Engineering	BE 6th sem	6360441761	Male	11/5/1999
56	srinivasindian123@gmail.com	SRINIVAS BS	1DA17CS169	Computer Science Engineering	BE 6th sem	8618757287	Female	5/31/2000
57	suhassr27@gmail.com	SUHAS S R	1DA17CS173	Computer Science Engineering	BE 6th sem	7892468341	Female	5/31/2000
58	suma@dr-ait.org	Suma M N	1DA17CS175	Computer Science Engineering	BE 6th sem	8105447454	Female	6/13/1999
59	supriha.m.bhatt1999@gmail.com	Supriha M Bhatt	1DA17CS177	Computer Science Engineering	BE 6th sem	9844722941	Male	5/18/2001
60	ksuraj626@gmail.com	Suraj S	1DA19IS048	Information Science Engineering	BE 2nd Sem	6360862259	Female	8/6/1999
61	vidhee6@gmail.com	Vidhee L Gujarati	1DA17EC150	Electronics and Communication Engineering	BE 6th sem	8317360584	Female	3/20/2000
62	kalasavijayalakshmi3677@gmail.com	Vijayalakshmi_kalasa	1DA19IS054	Information Science Engineering	BE 2nd Sem			
63	devadigavinutha14@gmail.com	VINUTHA VISHWANATHA DEVADIGA	1DA17CS193	Computer Science Engineering	BE 6th sem	9148670224	Female	8/25/1999

64	amyashasjawali@dr-ait.org							
65	yashaswinikitty@gmail.com	YASHAS JAWALI A M	1DA17CS196	Computer Science Engineering	BE 6th sem			
		YASHASWINI M K	1DA17CS198	Computer Science Engineering	BE 6th sem	9964640716	Male	2/1/2000
66	yatish100000@gmail.com	YATISH A		Electronics and Communication Engineering	BE 6th sem	9480940147	Female	9/18/1999
67	yogeshagowda17575@gmail.com	Yogesh A Gowda	1DA17EC161		BE 6th sem	9663310669	Male	5/4/1999
			1DA19IS057	Information Science Engineering	BE 2nd Sem	8317483107	Male	9/1/2001

Future Skills Training
On
CYBER SECURITY
SCHEDULE
From 22.07.2020 to 07.09.2020

Date	Time	Sessions	Topic	Trainer
DAY 1				
22-07-2020	3.00 PM - 4.00 PM	Session 1	Inauguration and Introduction	Principal
Wednesday				
DAY 2				
23-07-2020	11.00 AM- 12.00 PM	Session 2	Fundamentals of Computer Networks :Basic concepts of computer networks, network models, OSI	MC
Thursday	12.00 PM- 1 PM	Session 3		
DAY 3				
24-07-2020	11.00 AM- 12.00 PM	Session 4	TCP/IP, Layered architecture	MC
Friday	12.00 PM- 1 PM	Session 5	Client Server architecture, Peer-to-Peer Architecture.	
DAY 4				
25-07-2020	11.00 AM- 12.00 PM	Session 6	Application Layer: Working of WWW, E-Mail.	YCR
Saturday	12.00 PM- 1 PM	Session 7		

DAY 5				
27-07-2020	11.00 AM- 12.00 PM	Session 8	Working of TELNET, FTP, DNS And Secure Shell.	YCR
Monday	12.00 PM- 1 PM	Session 9		
DAY 6				
28-07-2020	11.00 AM- 12.00 PM	Session 10	Working of Bit Torrent, and some other applications.	NS
Tuesday	12.00 PM- 1 PM	Session 11	Architecture of E-Mail system, TELNET, DNS and WWW.	
DAY 7				
29-07-2020	11.00 AM- 12.00 PM	Session 12	Network Layer: Basic services used and provided by Physical Layer, Data link layer.	NS
Wednesday	12.00 PM- 1 PM	Session 13		
DAY 8				
30-07-2020	11.00 AM- 12.00 PM	Session 14	Basic services used and provided by network layer, transport layer, application layer.	SNS
Thursday	12.00 PM- 1 PM	Session 15		
DAY 9				
31-07-2020	11.00 AM- 12.00 PM	Session 16	Types of devices constituting a network.	SNS
Friday	12.00 PM- 1 PM	Session 17	Concept of Internet Service Providers (ISPs) and overall conceptual view of the Internet.	
DAY 10				
01-08-2020	11.00 AM- 12.00 PM	Session 18	Routing fundamentals. Different types of networks such as LAN, WAN, VPN, etc.	ASP
Saturday	12.00 PM- 1 PM	Session 19		
DAY 11				
03-08-2020	11.00 AM- 12.00 PM	Session 20	Essential for understanding cyber security: Cyber Security Concepts, Essential Terminologies.	ASP
Monday	12.00 PM- 1 PM	Session 21		

DAY 12				
04-08-2020	11.00 AM- 12.00 PM	Session 22	Understanding meaning and differences in various terms such as Breaches, Threats, Attacks, Exploits, and others	MC
Tuesday	12.00 PM- 1 PM	Session 23		
DAY 13				
05-08-2020	11.00 AM- 12.00 PM	Session 24	Protocols and Cyber Security Vulnerabilities: Hyper Text Transfer Protocol (HTTP) and corresponding cyber security vulnerabilities.	MC
Wednesday	12.00 PM- 1 PM	Session 25		
DAY 14				
06-08-2020	11.00 AM- 12.00 PM	Session 26	TCP, UDP, MAC.	YCR
Thursday	12.00 PM- 1 PM	Session 27		
DAY 15				
07-08-2020	11.00 AM- 12.00 PM	Session 28	IPv4, IPv6	YCR
Friday	12.00 PM- 1 PM	Session 29		
DAY 16				
08-08-2020	11.00 AM- 12.00 PM	Session 30	How to do sub netting, benefits of DHCP, and other related topics.	NS
Saturday	12.00 PM- 1 PM	Session 31		
DAY 17				
10-08-2020	11.00 AM- 12.00 PM	Session 32	Information Security and Cryptography: Various concepts of Cryptography. Symmetric key and Asymmetric key Cryptography.	NS
Monday	12.00 PM- 1 PM	Session 33		
DAY 18				
11-08-2020	11.00 AM- 12.00 PM	Session 34	Digital Signatures. Applications of Cryptography.	SNS
Tuesday	12.00 PM- 1 PM	Session 35		

DAY 19				
12-08-2020	11.00 AM- 12.00 PM	Session 36	OpenSSL. Hash Values Calculations MD5.	SNS
Wednesday	12.00 PM- 1 PM	Session 37		
DAY 20				
13-08-2020	11.00 AM- 12.00 PM	Session 38	SHA. Steganography.	ASP
Thursday	12.00 PM- 1 PM	Session 39		
DAY 21				
14-08-2020	11.00 AM- 12.00 PM	Session 40	Firewalls: Definition, Types of Firewalls, VPN Security.	ASP
Friday	12.00 PM- 1 PM	Session 41		
DAY 22				
15-08-2020	11.00 AM- 12.00 PM	Session 42	Security at the Application Layer- PGP, S/MIME.	MC
Saturday	12.00 PM- 1 PM	Session 43		
DAY 23				
17-08-2020	11.00 AM- 12.00 PM	Session 44	Security at Transport Layer- SSL and TLS, Security at Network Layer-IPsec.	MC
Monday	12.00 PM- 1 PM	Session 45		
DAY 24				
18-08-2020	11.00 AM- 12.00 PM	Session 46	System and Server Security: DOS/ DDOS attacks. Introduction to System Security, Server Security.	YCR
Tuesday	12.00 PM- 1 PM	Session 47		
DAY 25				
19-08-2020	11.00 AM- 12.00 PM	Session 48	OS Security, Physical Security. Network packet Sniffing, Network Design Simulation.	YCR
Wednesday	12.00 PM- 1 PM	Session 49		

DAY 26				
20-08-2020	11.00 AM- 12.00 PM	Session 50	Various concepts of system and server security. Intrusion detection and prevention.	NS
Thursday	12.00 PM- 1 PM	Session 51		
DAY 27				
21-08-2020	11.00 AM- 12.00 PM	Session 52	Internet and cloud security. Cyber security vulnerabilities, safeguards	NS
Friday	12.00 PM- 1 PM	Session 53		
DAY 28				
22-08-2020	11.00 AM- 12.00 PM	Session 54	Malware Concepts: Basics of Malware and its types - Virus, Worms.	SNS
Saturday	12.00 PM- 1 PM	Session 55		
DAY 29				
24-08-2020	11.00 AM- 12.00 PM	Session 56	Malware types -Spywares, Ransom wares. Malware Analysis.	SNS
Monday	12.00 PM- 1 PM	Session 57		
DAY 30				
25-08-2020	11.00 AM- 12.00 PM	Session 58	Anti-virus protection. Malware Analysis using machine learning,	ASP
Tuesday	12.00 PM- 1 PM	Session 59		
DAY 31				
26-08-2020	11.00 AM- 12.00 PM	Session 60	Web Services and Cyber Laws: Basics of Web Services, SOAP, REST.	ASP
Wednesday	12.00 PM- 1 PM	Session 61		
DAY 32				
27-08-2020	11.00 AM- 12.00 PM	Session 62	Cyber laws and forensics, Cyber security regulations	MC
Thursday	12.00 PM- 1 PM	Session 63		

DAY 33				
28-08-2020	11.00 AM- 12.00 PM	Session 64	Role of design patterns. Software intensive systems.	MC
Friday	12.00 PM- 1 PM	Session 65		
DAY 34				
29-08-2020	11.00 AM- 12.00 PM	Session 66	Cyber Security and Machine Learning: Regression, Clustering, classification.	YCR
Saturday	12.00 PM- 1 PM	Session 67		
DAY 35				
31-08-2020	11.00 AM- 12.00 PM	Session 68	Association rule of learning, dimensionality reduction. Generative models, supervised, unsupervised.	YCR
Monday	12.00 PM- 1 PM	Session 69		
DAY 36				
01-09-2020	11.00 AM- 12.00 PM	Session 70	Semi-supervised, Reinforcement learning. Dimensionality reduction, generative models.	NS
Tuesday	12.00 PM- 1 PM	Session 71		
DAY 37				
02-09-2020	11.00 AM- 12.00 PM	Session 72	Cyber security Tasks and Machine Learning: prediction; prevention; detection; response; monitoring. (Network (network traffic analysis and intrusion detection); endpoint (anti-malware); application (WAF or database firewalls); user (UBA); process (anti-fraud). Security Check: in transit in real time; at rest; historically; etc.	NS
Wednesday	12.00 PM- 1 PM	Session 73		
DAY 38				
03-09-2020	11.00 AM- 12.00 PM	Session 74	Examples: Network Protection (regression, classification, clustering etc.); Endpoint Protection: classification for malware, spyware and ransomware; clustering for malware protection on secure email gateways (e.g., to separate legal file attachments from outliers); Application Security; User Behaviour; Process Behaviour	SNS
Thursday	12.00 PM- 1 PM	Session 75		

DAY 39				
04-09-2020	11.00 AM- 12.00 PM	Session 76	Cyber Security and Recent Technologies: Security aspects in IoT.	SNS
Friday	12.00 PM- 1 PM	Session 77		
DAY 40				
05-09-2020	11.00 AM- 12.00 PM	Session 78	Cloud Computing and Image/video data. Biometrics.	ASP
Saturday	12.00 PM- 1 PM	Session 79		
DAY 41				
07-09-2020	11.00 AM- 12.00 PM	Session 80	Mobile Computing and Hardening on android and iOS. Security, Android Malware Analysis.	ASP
Monday	12.00 PM- 1 PM	Session 81		
07-09-2020 Monday	1.00 PM- 1.30 PM	Session 81	Feedback Session and Valedictory	Coordinators
20 Practical Sessions will be conducted during 20-08-2020 to 30-9-2020				

Date	Time	Sessions	Topic	Trainer
DAY 1				
20-07-2020 Monday	10.30 AM -11.30 AM	Session 1	Inauguration and Introduction	Principal and HOD
	11.30 AM -12.30 PM			

DAY 2				
21-07-2020 Tuesday	11.00 AM- 12.00 PM	Session 2	Fundamentals of Computer Networks :Basic concepts of computer networks, network models, OSI	MC
	12.00 PM- 1 PM	Session 3		
DAY 3				
22-07-2020 Wednesday	11.00 AM- 12.00 PM	Session 4	TCP/IP, Layered architecture Client Server architecture, Peer-to-Peer Architecture.	MC
	12.00 PM- 1 PM	Session 5		
DAY 4				
23-07-2020 Thursday	11.00 AM- 12.00 PM	Session 6	Application Layer: Working of WWW, E-Mail.	YCR
	12.00 PM- 1 PM	Session 7		
DAY 5				
24-07-2020 Friday	11.00 AM- 12.00 PM	Session 8	Working of TELNET, FTP, DNS And Secure Shell.	YCR
	12.00 PM- 1 PM	Session 9		
DAY 6				
25-07-2020 Saturday	11.00 AM- 12.00 PM	Session 10	Working of Bit Torrent, and some other applications.	NS
	12.00 PM- 1 PM	Session 11	Architecture of E-Mail system, TELNET, DNS and WWW.	
DAY 7				
27-07-2020 Monday	11.00 AM- 12.00 PM	Session 12	Network Layer: Basic services used and provided by Physical Layer, Data link layer.	NS
	12.00 PM- 1 PM	Session 13		
DAY 8				
28-07-2020 Tuesday	11.00 AM- 12.00 PM	Session 14	Basic services used and provided by network layer, transport layer, application layer.	SNS
	12.00 PM- 1 PM	Session 15		
DAY 9				
29-07-2020	11.00 AM- 12.00 PM	Session 16	Types of devices constituting a network.	SNS

Wednesday	12.00 PM- 1 PM	Session 17	Concept of Internet Service Providers (ISPs) and overall conceptual view of the Internet.	
DAY 10				
30-07-2020 Thursday	11.00 AM- 12.00 PM	Session 18	Routing fundamentals. Different types of networks such as LAN, WAN, VPN, etc.	ASP
	12.00 PM- 1 PM	Session 19		
DAY 11				
01-08-2020 Saturday	11.00 AM- 12.00 PM	Session 20	Essential for understanding cyber security: Cyber Security Concepts, Essential Terminologies.	ASP
	12.00 PM- 1 PM	Session 21		
DAY 12				
03-08-2020 Monday	11.00 AM- 12.00 PM	Session 22	Understanding meaning and differences in various terms such as Breaches, Threats, Attacks, Exploits, and others	MC
	12.00 PM- 1 PM	Session 23		
DAY 13				
04-08-2020 Tuesday	11.00 AM- 12.00 PM	Session 24	Protocols and Cyber Security Vulnerabilities: Hyper Text Transfer Protocol (HTTP) and corresponding cyber security vulnerabilities. Various security attacks related to HTTP.	MC
	12.00 PM- 1 PM	Session 25		
DAY 14				
05-08-2020 Wednesday	11.00 AM- 12.00 PM	Session 26	TCP, UDP, MAC.	YCR
	12.00 PM- 1 PM	Session 27		
DAY 15				
06-08-2020 Thursday	11.00 AM- 12.00 PM	Session 28	IPv4, IPv6	YCR
	12.00 PM- 1 PM	Session 29		
DAY 16				

07-08-2020 Friday	11.00 AM- 12.00 PM	Session 30	How to do sub netting, benefits of DHCP, and other related topics.	NS
	12.00 PM- 1 PM	Session 31		
DAY 17				
08-08-2020 Saturday	11.00 AM- 12.00 PM	Session 32	Information Security and Cryptography: Various concepts of Cryptography. Symmetric key and Asymmetric key Cryptography.	NS
	12.00 PM- 1 PM	Session 33		
DAY 18				
10-08-2020 Monday	11.00 AM- 12.00 PM	Session 34	Digital Signatures. Applications of Cryptography.	SNS
	12.00 PM- 1 PM	Session 35		
DAY 19				
11-08-2020 Tuesday	11.00 AM- 12.00 PM	Session 36	OpenSSL. Hash Values Calculations MD5.	SNS
	12.00 PM- 1 PM	Session 37		
DAY 20				
12-08-2020 Wednesday	11.00 AM- 12.00 PM	Session 38	SHA. Steganography.	ASP
	12.00 PM- 1 PM	Session 39		
DAY 21				
13-08-2020 Thursday	11.00 AM- 12.00 PM	Session 40	Firewalls: Definition, Types of Firewalls, VPN Security. Security Protocols.	ASP
	12.00 PM- 1 PM	Session 41		
DAY 22				
14-08-2020 Friday	11.00 AM- 12.00 PM	Session 42	Security at the Application Layer- PGP, S/MIME.	MC
	12.00 PM- 1 PM	Session 43		
DAY 23				
15-08-2020 Saturday	11.00 AM- 12.00 PM	Session 44	Security at Transport Layer- SSL and TLS, Security at Network Layer- IPsec.	MC
	12.00 PM- 1 PM	Session 45		
DAY 24				

17-08-2020 Monday	11.00 AM- 12.00 PM	Session 46	System and Server Security: DOS/ DDOS attacks. Introduction to System Security, Server Security.	YCR
	12.00 PM- 1 PM	Session 47		
DAY 25				
18-08-2020 Tuesday	11.00 AM- 12.00 PM	Session 48	OS Security, Physical Security. Network packet Sniffing, Network Design Simulation.	YCR
	12.00 PM- 1 PM	Session 49		
DAY 26				
19-08-2020 Wednesday	11.00 AM- 12.00 PM	Session 50	Various concepts of system and server security. Intrusion detection and prevention.	NS
	12.00 PM- 1 PM	Session 51		
DAY 27				
20-08-2020 Thursday	11.00 AM- 12.00 PM	Session 52	Internet and cloud security. Cyber security vulnerabilities, safeguards	NS
	12.00 PM- 1 PM	Session 53		
DAY 28				
21-08-2020 Friday	11.00 AM- 12.00 PM	Session 54	Malware Concepts: Basics of Malware and its types - Virus, Worms. Trojans, Rootkits, Robots, Adware's.	SNS
	12.00 PM- 1 PM	Session 55		
DAY 29				
22-08-2020 Saturday	11.00 AM- 12.00 PM	Session 56	Malware types -Spywares, Ransom wares. Malware Analysis.	SNS
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DAY 31				
25-08-2020 Tuesday	11.00 AM- 12.00 PM	Session 60	Web Services and Cyber Laws: Basics of Web Services, SOAP, REST.	ASP
	12.00 PM- 1 PM	Session 61		
DAY 32				

26-08-2020 Wednesday	11.00 AM- 12.00 PM	Session 62	Cyber laws and forensics, Cyber security regulations	MC
	12.00 PM- 1 PM	Session 63		
DAY 33				
27-08-2020 Thursday	11.00 AM- 12.00 PM	Session 64	Role of design patterns. Software intensive systems.	MC
	12.00 PM- 1 PM	Session 65		
DAY 34				
28-08-2020 Friday	11.00 AM- 12.00 PM	Session 66	Cyber Security and Machine Learning: Regression, Clustering, classification.	YCR
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DAY 35				
29-08-2020 Saturday	11.00 AM- 12.00 PM	Session 68	Association rule of learning, dimensionality reduction. Generative models, supervised, unsupervised.	YCR
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DAY 36				
31-08-2020 Monday	11.00 AM- 12.00 PM	Session 70	Semi-supervised, Reinforcement learning. Dimensionality reduction, generative models.	NS
	12.00 PM- 1 PM	Session 71		
DAY 37				
01-09-2020 Tuesday	11.00 AM- 12.00 PM	Session 72	Cyber security Tasks and Machine Learning: prediction; prevention; detection; response; monitoring. (Network (network traffic analysis and intrusion detection); endpoint (anti-malware); application (WAF or database firewalls); user (UBA); process (anti-fraud). Security Check: in transit in real time; at rest; historically; etc.	NS
	12.00 PM- 1 PM	Session 73		
DAY 38				
02-09-2020 Wednesday	11.00 AM- 12.00 PM	Session 74	Examples: Network Protection (regression, classification, clustering etc.); Endpoint Protection: classification for malware, spyware and ransomware; clustering for malware protection on secure email gateways (e.g., to separate legal file attachments from outliers); Application Security; User Behaviour; Process Behaviour	SNS
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DAY 39				
03-09-2020 Thursday	11.00 AM- 12.00 PM	Session 76	Cyber Security and Recent Technologies: Security aspects in IoT.	SNS
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DAY 40				
04-09-2020 Friday	11.00 AM- 12.00 PM	Session 78	Cloud Computing and Image/video data. Biometrics.	ASP
	12.00 PM- 1 PM	Session 79		
DAY 41				
05-09-2020 Saturday	9.30 AM- 10.30AM	Session 80	Mobile Computing and Hardening on android and iOS. Security, Android Malware Analysis.	ASP
	10.30 AM- 11.30AM	Session 81		
DAY 42				
05 -09-2020 Saturday	12.00PM- 1.00 PM	Session 82	Feedback Session and Valedictory	Coordinators
20 Practical Sessions will be conducted during 07-09-2020 to 30-9-2020				

Trainers

1	Dr.Yamuna Devi (YCR) Associate Professor and Head Dept. of TCE Dr.AIT Bengakuru-56.
2	Dr.Mary Cherian(MC) Professor Dept. of CSE Dr.AIT Bengakuru-56.
3	Ms.Nithyashree S(NS) Assistant Professor Dept. of ECE Dr.AIT Bengakuru-56.

4	Ms.Spoorthi P A.(ASP) Assistant Professor Dept. of ECE Dr.AIT Bengakuru-56.
5	Ms.Sujay S N (SNS) Assistant Professor Dept. of ECE Dr.AIT Bengakuru-56.

Course: Cyber Security	Trainer:
Student Attendance	Spoorthi P A

Sl. No.	Student Name	USN	01-08-2020	03-08-2020	13-08-2020	14-08-2020	16-11-2020	17-11-2020	18-11-2020	19-11-2020
1	Aditya Tiwari	1DA17IS002	1	2	3	4	5	6	7	8
2	Akshaya K	1DA17CS010	1	2	3	4	5	6	7	8
3	Amogha S	1DA17CS013	1	2	2	3	4	5	6	7
4	Anagha Ajoykumar	1DA17CS014	1	2	3	4	5	6	7	7
5	Anagha Anand	1DA17EC011	1	2	3	4	5	6	7	8
6	ANUPAMA A S	1DA18CS019	1	2	3	4	5	6	7	7
7	Anusha.M.G	1DA19CS016	1	2	3	4	5	6	7	8
8	Chaithanya J Umashankar	1DA19IS007	0	2	3	4	5	6	7	8
9	Chandana K	1DA17CS034	1	2	3	4	5	6	7	7
10	D M SRUJAN GOWDA	1DA17EC137	1	2	3	4	5	6	7	8
11	Darshan C R	1DA18EC410	1	2	3	4	5	6	7	8
12	Darshith.S	1DA19IS010	1	2	3	4	4	5	6	7
13	Deepak S R	1DA18CS044	1	2	3	4	5	6	7	8
14	JAYAM SURENDRA SINDHU	1DA17CS058	1	2	3	4	5	6	7	8
15	Kartik	1DA18CS062	1	2	3	4	5	6	7	7
16	Kavita Nagaraj Prabhu	1DA18TE015	1	2	3	4	5	6	7	8
17	KAVYA H C	1DA18EC415	1	2	3	4	5	6	7	8
18	Kavya PN	1DA18EC416	1	2	3	4	5	6	7	7
19	Kavya. V	1DA19IS016	1	2	3	4	5	6	7	8
20	Kirankumar B M	1da18ec417	1	2	3	4	5	6	7	8
21	Lavanya V	1DA18CS413	1	2	3	4	5	6	7	8
22	Lokesha	1DA19EI407	1	2	3	4	5	6	6	7
23	Manoj R	1DA17EC076	1	2	3	4	5	6	7	8
24	Muskan sultana	1DA19IS022	1	2	3	4	5	6	7	8
25	Medhini Sampemane	1DA19IS021	1	2	3	4	5	6	7	8
26	Namitha Rao	1DA17CS089	1	2	3	4	5	6	7	8

27	Nikita Ashok Shet	1DA17CS095	1	2	3	4	4	5	6	7
28	Paavani Komarla	1DA17CS103	1	2	3	4	5	6	7	8
29	Pooja BS	1DA17CS108	1	2	3	4	5	6	7	8
30	Pooja yadav P N	1DA18EC429	1	2	3	4	5	6	7	8
31	Poojit Chowdry	1DA17CS110	1	2	3	4	5	6	7	8
32	Prajwal	1DA18TE028	1	2	3	4	5	6	7	8
33	PRASHANT	1DA18EC432	1	2	3	4	5	6	7	8
34	Prashanth Raj C S	1da18ec433	1	2	3	4	5	6	7	8
35	PRATHEEPKUMAR NM	1DA18EC434	1	2	3	4	5	6	7	8
36	Pratik Sharma	1DA17CS117	1	2	3	4	5	6	7	8
37	PRERANA V	1DA19IS025	1	2	3	4	5	6	7	8
38	Prithvi B	1DA17EC102	1	2	3	4	5	6	7	8
39	Rajalakshmi N N	1DA19CS119	1	2	3	4	5	5	6	7
40	Raksha S Hande	1DA17CS131	1	2	3	4	5	6	7	8
41	RAKSHITH J	1DA17EC113	1	2	3	4	4	5	6	7
42	Rashmi MN	1DA19IS030	1	2	3	4	5	6	7	8
43	RESHMA RAO C H	1DA19IS031	1	2	3	4	5	6	7	8
44	Roopashree B R	1DA17EC117	1	2	3	4	5	6	7	8
45	SACHIN B	1DA18EC438	1	2	3	4	5	6	7	8
46	Sandhya M V	1DA17EC121	1	2	3	4	4	5	6	7
47	Sharath kumara H S	1DA18EC441	1	2	3	4	5	6	7	8
48	SENTHILANAND P	1DA17CS153	1	2	3	4	5	6	7	8
49	SHASHANK B	1DA17EC126	1	2	3	4	5	6	7	8
50	Shashank b baragur	1DA17EC127	1	2	3	4	5	6	7	8
51	Shashi Kumar S	1DA18EC442	1	2	3	4	5	6	7	7
52	Shravya MS	1DA17CS201	1	2	3	4	5	6	7	8
53	SHRUSTI	1DA17CS160	1	2	3	4	5	6	7	8
54	Shilpa M	1DA17EC129	1	2	3	4	5	6	7	8
55	Srikanth R V	1DA17EC162	1	2	3	4	5	6	7	8
56	SRINIVAS BS	1DA17CS169	1	2	3	4	5	6	7	7
57	SUHAS S R	1DA17CS173	1	2	3	4	5	6	7	8
58	Suma M N	1DA17CS175	1	2	3	4	5	6	7	8
59	Supritha M Bhatt	1DA17CS177	1	2	3	4	5	6	7	8
60	Suraj S	1DA19IS048	1	2	3	4	5	6	7	8

61	Vidhee L Gujarati	1DA17EC150	1	2	3	4	5	6	7	7
62	Vijaylakshmi_kalasa	1DA19IS054	1	2	3	4	5	6	7	8
63	VINUTHA VISHWANATHA DEVADIGA	1DA17CS193	1	2	3	4	5	6	7	8
64	YASHAS JAWALI A M	1DA17CS196	1	2	3	4	5	6	7	8
65	YASHASWINI M K	1DA17CS198	1	2	3	4	5	6	7	7
66	YATISH A	1DA17EC161	1	2	3	4	5	6	7	7
67	Yogesh A Gowda	1DA19IS057	1	2	3	4	5	6	7	8

Course: Cyber Security

Student Attendance

Sl. No.	Student Name	USN	25-07-2020	27-07-2020	06-08-2020
1	Aditya Tiwari	1DA17IS002	1	2	3
2	Akshaya K	1DA17CS010	1	2	3
3	Amogha S	1DA17CS013	1	2	3
4	Anagha Ajoykumar	1DA17CS014	1	2	3
5	Anagha Anand	1DA17EC011	1	2	3
6	ANUPAMA A S	1DA18CS019	1	2	3
7	Anusha.M.G	1DA19CS016	1	2	3
8	Chaithanya J Umashankar	1DA19IS007	1	2	3
9	Chandana K	1DA17CS034	1	2	3
10	D M SRUJAN GOWDA	1DA17EC137	1	2	3
11	Darshan C R	1DA18EC410	1	2	3
12	Darshith.S	1DA19IS010	1	2	3
13	Deepak S R	1DA18CS044	1	2	3
14	JAYAM SURENDRA SINDHU	1DA17CS058	1	2	3
15	Kartik	1DA18CS062	1	2	3
16	Kavita Nagaraj Prabhu	1DA18TE015	1	2	3
17	KAVYA H C	1DA18EC415	1	2	3
18	Kavya PN	1DA18EC416	1	2	3
19	Kavya. V	1DA19IS016	1	2	3
20	Kirankumar B M	1da18ec417	1	2	3
21	Lavanya V	1DA18CS413	1	2	3
22	Lokesha	1DA19EI407	1	2	3
23	Manoj R	1DA17EC076	1	2	3
24	Muskan sultana	1DA19IS022	1	2	3
25	Medhini Sampemane	1DA19IS021	1	2	3
26	Namitha Rao	1DA17CS089	1	2	3
27	Nikita Ashok Shet	1DA17CS095	0	1	2
28	Paavani Komarla	1DA17CS103	1	2	3
29	Pooja BS	1DA17CS108	0	1	2
30	Pooja yadav P N	1DA18EC429	1	2	3
31	Poojit Chowdry	1DA17CS110	1	2	3
32	Prajwal	1DA18TE028	1	2	3
33	PRASHANT	1DA18EC432	1	2	3
34	Prashanth Raj C S	1da18ec433	1	2	3
35	PRATHEEPKUMAR NM	1DA18EC434	1	2	3
36	Pratik Sharma	1DA17CS117	1	2	3
37	PRERANA V	1DA19IS025	1	2	3
38	Prithvi B	1DA17EC102	1	2	3
39	Rajalakshmi N N	1DA19CS119	1	2	3
40	Raksha S Hande	1DA17CS131	1	2	3
41	RAKSHITH J	1DA17EC113	1	2	3

42	Rashmi MN	1DA19IS030	1	2	3
43	RESHMA RAO C H	1DA19IS031	1	2	3
44	Roopashree B R	1DA17EC117	1	2	3
45	SACHIN B	1DA18EC438	1	2	3
46	Sandhya M V	1DA17EC121	1	2	3
47	Sharath kumara H S	1DA18EC441	1	2	3
48	SENTHILANAND P	1DA17CS153	1	2	3
49	SHASHANK B	1DA17EC126	1	2	3
50	Shashank b baragur	1DA17EC127	1	2	3
51	Shashi Kumar S	1DA18EC442	1	2	3
52	Shravya MS	1DA17CS201	1	2	3
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56	SRINIVAS BS	1DA17CS169	1	2	3
57	SUHAS S R	1DA17CS173	1	2	3
58	Suma M N	1DA17CS175	1	2	3
59	Supritha M Bhatt	1DA17CS177	1	2	3
60	Suraj S	1DA19IS048	1	2	3
61	Vidhee L Gujarati	1DA17EC150	1	2	3
62	Vijaylakshmi_kalasa	1DA19IS054	1	2	3
63	VINUTHA VISHWANATHA DEVADIGA	1DA17CS193	1	2	3
64	YASHAS JAWALI A M	1DA17CS196	1	2	3
65	YASHASWINI M K	1DA17CS198	1	2	3
66	YATISH A	1DA17EC161	1	2	3
67	Yogesh A Gowda	1DA19IS057	1	2	3

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Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathalli, Bengaluru -56

NPIU

National Project Implementation Unit



Cordially invites to all Deans, HODs, Staff and students of Dr.AIT

FOR THE INAUGURATION OF
TEQIP ASSISTED STUDENT TRAINING ON
FUTURE SKILLS TECHNOLOGY
FROM 10TH MARCH 2021 TO 20TH MARCH 2021

On

Artificial Intelligence and Machine Learning

In the gracious presence of

Dr Rajendra.G, Principal, Dr. AIT

Dr.Siddaraju, Dean (Academic), Dr.AIT

Dr.Mahalinga.V.Mandi,TEQIP Coordinator,Dr.AIT

Dr.Ramesh.S, Professor & Head of the department of ECE

Course Coordinators:

Dr.Shivaputra, Assistant Professor, Dr.AIT,ECE.

Harsha.R, Assistant Professor, Dr.AIT,ECE.

REPORT

on

TEQIP- III assisted training program on Future Skill Technologies:

“Artificial Intelligence and Machine Learning”

Objectives of training program on Future Skill Technologies:

Artificial Intelligence is a major step forward in how computer system adapts, evolves and learns. It has widespread application in almost every industry and is considered to be a big technological shift, similar in scale to past events such as the industrial revolution, the computer age, and the smart phone revolution.

This course will give an opportunity to gain expertise in one of the most fascinating and fastest growing areas of Computer Science through classroom program that covers fascinating and compelling topics related to human intelligence and its applications in industry, defence, healthcare, agriculture and many other areas. This course will give the students a rigorous, advanced and professional graduate-level foundation in Artificial Intelligence

The TEQIP assisted training program on Future Skill Technology “**Artificial Intelligence and Machine Learning**” for students of Dr. Ambedkar Institute of Technology, Bangalore was inaugurated on 10.03.2021 at 10.30 am. Totally 77 students from different branches, mainly Electronics and Communication Engineering, Computer Science and Information Science attended the inaugural function of the training program. The training included 50 Hours of theory introduction to AI, ML, clusters techniques, Sensors, different interfaces, and communication protocols. The topics covered are as per the syllabus provided by NPIU.

The sessions started from 10.03.2021 with **Harsha.R**, Assistant Professor, Dept. Of ECE, Dr. AIT as the trainer from the session “Introduction to A.I”. Various theory sessions were handled by **Dr. Shivaputra**, Assistant Professor, Dept. Of ECE, Dr. AIT as per the schedule.

A proctored online mid-semester assessment was conducted by NPIU on 21.03.2021 and was evaluated by NPIU. The results were communicated to the students as well as the trainers. The performance of the students is found to be good. The conduction of theory and project sessions were successfully completed by the trainers as per the schedule. The Proctored online final assessment is yet to be conducted.

Outcomes of training program on Future Skill Technologies:

After undergoing this course, the students will be able to:

- Understand Classical and Modern AI
- Formulate problems as learning problems
- Understand the role of data in modern AI
- Train and evaluate ML-based AI systems
- Program AI systems using modern frameworks

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1. Module 01: Fundamentals of Modern AI
 - History of AI
 - Mathematical Basics (Linear Algebra, Probability)
 - Classical AI (Search Algorithms)
 - Basics of ML (Classification, Regression, Clustering)
2. Module 02: Deep Learning
 - Neural Networks
 - Back Propagation
 - Deep Learning Architectures
 - Training DNNs and Hyper Parameters
 - Unsupervised Deep Learning
3. Module 03: Perception
 - Problems related to
 - Text
 - Images
 - Speech
4. Module 04: Planning
 - Planning under Uncertainty
 - Markov Decision Processes
 - Partially Observable MDPs
 - Multi Agent Systems

Future skills on ARTIFICIAL INTELLIGENCE and MACHINE LEARNING

Date	Time	Sessions	Topics	Trainers	Venue/Teaching Methodology
10-03-2021	10.30-1130.AM		Inauguration	HOD,TEQIP Coordinator,Dr Shivputra,Harsha.R	Seminar Hall C-302
	1130-12.30 PM	Session 1	Module 1-History of Artificial Intelligence:	Harsha.R	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 2	Mathematical Basics: Linear Algebra	Harsha.R	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 3	Mathematical Basics: Linear Algebra	Harsha.R	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 4	Mathematical Basics: Probability 1	Dr Shivputra	Seminar Hall C-302 Offline Mode
12-03-2021	10.30-1130.AM	Session 5	Mathematical Basics: Probability 2	Dr Shivputra	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 6	Mathematical Basics: Probability	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 7	Introduction to Machine Learning	Harsha.R	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 8	Classical AI: Search Algorithms	Dr Shivputra	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 9	Classical AI: Search Algorithms 2:	Harsha.R	Seminar Hall C-302 Offline Mode
13-03-2021	10.30-1130.AM	Session 10	Computing Basics using Python 1:	Harsha.R	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 11	Computing Basics using Python 2:	Harsha.R	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 12	Basics of ML: Regression 1	Harsha.R	Seminar Hall C-302 Offline Mode

Future skills on ARTIFICIAL INTELLIGENCE and MACHINE LEARNING

	2.00-3.00 PM	Session 13	Basics of ML: Regression 2	Harsha.R	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 14	Basics of ML: Classification - Naive Bayes	Harsha.R	Seminar Hall C-302 Offline Mode
15-03-2021	10.30-1130.AM	Session 15	Basics of ML: Classification - SVM	Harsha.R	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 16	Machine Learning with Python 1	Harsha.R	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 17	Machine Learning with Python 2	Harsha.R	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 18	Basics of ML: Clustering 1	Harsha.R	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 19	Basics of ML: Clustering 2	Harsha.R	Seminar Hall C-302 Offline Mode
16-03-2021	10.30-1130.AM	Session 20	Neural Networks 1	Dr Shivputra	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 21	Neural Networks 2	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 22	Neural Networks 3	Dr Shivputra	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 23	Clustering with Python	Harsha.R	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 24	Clustering with Python	Harsha.R	Seminar Hall C-302 Offline Mode
17-03-2021	10.30-1130.AM	Session 25	Clustering with Python	Dr Shivputra	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 26	Back Propagation	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 27	Back Propagation	Dr Shivputra	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 28	Deep Learning Architectures	Harsha.R	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 29	Deep Learning Architectures	Harsha.R	Seminar Hall C-302 Offline Mode
17-03-2021	10.30-1130.AM	Session 30	Classification K-NN	Dr Shivputra	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 31	3D Face Recognition Using Deep Learning	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 32	3D Face Recognition Using Deep Learning	Dr Shivputra	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 33	Applications of AI-ML	Harsha.R	Seminar Hall C-302 Offline Mode

Future skills on ARTIFICIAL INTELLIGENCE and MACHINE LEARNING

	3.00-4.00PM	Session 34	Adversarial Learning for Knowledge Integration from Weakly Labelled Datasets	Harsha.R	Seminar Hall C-302 Offline Mode
18-03-2021	10.30-1130.AM	Session 35	Random Forest 1	Dr Shivputra	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 36	Random Forest 2	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 37	Deep Learning: Image Classification 1	Dr Shivputra	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 38	Deep Learning: Image Classification 2	Dr Shivputra	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 39	Deep Learning: Image Classification 3	Dr Shivputra	Seminar Hall C-302 Offline Mode
19-03-2021	10.30-1130.AM	Session 40	Markov Decision Process 1	Dr Shivputra	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 41	Markov Decision Process 2	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 42	Multi-Agent System	Harsha.R	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 43	Unsupervised Deep Learning	Dr Shivputra	Seminar Hall C-302 Offline Mode
	HOME ASSIGNMENT	Session 44	Mini Project 1	Harsha.R	Seminar Hall C-302 Offline Mode
	HOME ASSIGNMENT	Session 45	Mini Project 2	Dr Shivputra	Seminar Hall C-302 Offline Mode
20-03-2021	10.30-1130.AM	Session 46	Research Problems related to ML	Harsha.R	Seminar Hall C-302 Offline Mode
	1130-12.30 PM	Session 47	Research Problems related to ML	Dr Shivputra	Seminar Hall C-302 Offline Mode
	12.30-1.30 PM	Session 48	Research Problems related to ML	Dr Shivputra	Seminar Hall C-302 Offline Mode
	2.00-3.00 PM	Session 49	Auto Encoders	Harsha.R	Seminar Hall C-302 Offline Mode
	3.00-4.00PM	Session 50	Valedictory	Dr Shivputra, Harsha.R	Seminar Hall C-302 Offline Mode



Dr. Ambedkar Institute of Technology

(An Autonomous Institution, Aided by Government of Karnataka)

Affiliated to Visvesvaraya Technological University, Belgaum & Approved by AICTE, New Delhi
BDA Outer Ring Road, Near Jnana Bharathi Campus, Mallathally, Bengaluru-560056, Karnataka

Future Skill Training under TEQIP-III

On

“Virtual Reality”

Chief Convener

Dr. G Rajendra

Principal, Dr. AIT, Bangalore

Convener

Dr. Mahalinga V Mandi

Dean (Planning and Development) and
TEQIP-III Coordinator, Dr. AIT

Course facilitator and coordinator

Kavitha Devi CS

Assistant Professor,
Dept. of ECE, Dr. AIT

Date: 10/03/202

Timings: 10.30 AM – 12.30AM

Google Meet Link: <https://meet.google.com/frs-udkx-skw>



AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathalli, Bengaluru-56

Dept. of Electronics and Communication Engineering

Future Skill Training under TEQIP-III on “Virtual Reality”

Day	Hours	Class	Sessions	Topics Covered
10-03-2021	3	1	Theory	Fundamentals of Virtual Reality: What is Virtual Reality?
		2	Theory	Virtual Reality as an Immersive Technology, Reality-Virtuality Continuum
		3	Theory	Working Principle, Uses and Benefits
11-03-2021	3	4	Theory	History of Virtual Reality, Application Domains
		5	Theory	Virtual Reality Hardware and Software: Introduction
		6	Theory	Field of View, Degrees of Freedom
12-03-2021	3	7	Theory	Stereoscopy, Hardware
		8	Theory	Input Devices, Output Devices
		9	Theory	Virtual Reality Displays, Tracking - Magnetic
13-03-2021	3	10	Theory	Electromagnetic, Ultrasonic and Inertia
		11	Theory	Optical, Software
		12	Theory	Software: Platforms – Development and Deployment,
14-03-2021	3	13	Theory	VR Scripting, VRML
		14	Theory	X3D, WebVR
		15	Theory	Creating a Virtual Reality Experience – Design
15-03-2021	4	16	Theory	Illusions of Presence, Perceptual Modalities
		17	Theory	Sight, Hearing, Touch
		18	Hands-on	Hands on Tutorial: Unity Installation, Navigating the Documentation
		19	Hands-on	Getting Started with Unity-Starting a new Project, Navigating the Unity Interface
16-03-2021	4	20	Theory	Proprioception, Balance and Physical Motion
		21	Theory	Smell and Taste, Multimodal Perceptions,
		22	Hands-on	Understanding the default workspace, Creating a simple environment with basic 3D
		23	Hands-on	Build and Run, Scripting, Defining Object Behavior, Applying Constraints
17-03-2021	4	24	Theory	Perception of Space and Time, Perceptual Stability
		25	Theory	Attention, and Action, Project: Creating a Simple Game in Unity
		26	Hands-on	, Adding Audio, Gaze Based Interaction Introduction to Blender

		27	Hands-on	Creating a Model - Unit Cube, UV Texture Image
18-03-2021	4	28	Theory	Health Effect: Motion Sickness, Eye Strain, Seizures
		29	Theory	After-effects, Factors Affecting Health, Design Guidelines: Hardware
		30	Hands-on	Exporting the Model, Importing into Unity
		31	Hands-on	Create a simple single player 'Space-War' game
19-03-2021	4	32	Theory	System Calibration, Latency Reduction, General Design, Motion Design,
		33	Theory	Interaction Design, Usage, Measuring Sickness
		34	Hands-on	The player stands with a weapon in his hand and faces attack from enemy in different
		35	Hands-on	The player can nullify the attack by firing (use gaze based interaction)
20-03-2021	4	36	Theory	Creating a Virtual Reality Experience – Implementation
		37	Theory	Rendering: Virtual Environments, Object Modeling
		38	Hands-on	When an approaching attack can't be nullified by firing
		39	Hands-on	the player can save himself by moving away (use head movements) from the attack
21-03-2021	4	40	Theory	Geometric Transformation, Perspective Views, 3D Clipping
		41	Theory	Stereoscopic Vision, Rendering, Texture Mapping
		42	Hands-on	. If any attack hits the player
		43	Hands-on	, he loses life and occasionally if he can grab an approaching 'super-comet
22-03-2021	4	44	Theory	360 degree Images and Videos, Navigation: Navigation in VR Environment
		45	Theory	Navigation Characteristics, Locomotion Techniques – Physical and Virtual
		46	Hands-on	he gains life
		47	Hands-on	The game ends when the player exhausts his life
23-03-2021	4	48	Theory	Wayfinding – Landmark, Signs and Maps Interaction: Interacting with V Objects
		49	Theory	Direct and Indirect Interactions, Modes of Interactions
		50	Hands-on	Scoring is based on nullifying attacks.
		51	Hands-on	Scoring is based on nullifying attacks.
24-03-2021	4	52	Theory	Multi-modal Interaction, Selection, Manipulation, Collaborative VR
		53	Theory	Putting Everything Together – Case Study, Billiards Board, Unity Game Engine
		54	Hands-on	Creating a Simple Game in Unity by students
		55	Hands-on	Creating a Simple Game in Unity by students

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2021/02/02 12:52:36 PM	Keerthana K S	keerthanaks4999@gmail.com	Electronics	Female	04-09-1999	YES
2021/02/02 12:55:17 PM	Vidhee L Gujarati	vidhee6@gmail.com	ECE	Female	06-08-1999	YES
2021/02/02 1:03:24 PM	(SHASHANK B	shashank09111999@gmail.com	Electronics	Male	09-11-1999	YES
2021/02/02 1:06:17 PM	(Prajwal n	since61999@gmail.com	CSE	Male	30-06-1999	YES
2021/02/02 1:09:10 PM	(Shanmukha Timmapp	Sandeepnaik043@gmail.com	Computer	Male	28-01-1997	YES
2021/02/02 1:09:26 PM	(Prarthana B M	bmprarthana@gmail.com	ECE	Female	12-02-1999	YES
2021/02/02 1:13:33 PM	(Sowndarya B A	sownduashok@gmail.com	Electronics	Female	21-02-2000	YES
2021/02/02 1:13:56 PM	(Supritha S	supritha5523@gmail.com	ECE	Female	23-10-2000	YES
2021/02/02 1:16:38 PM	(Supriya K	supriyak4215@gmail.com	Electronics	Female	31-07-1999	YES
2021/02/02 1:16:51 PM	(Niveditha V	inivedithav@gmail.com	Computer	Female	26-09-1998	YES
2021/02/02 1:18:00 PM	(Sinchana P	sinchanapgowda444@gmail.com	CSE	Female	04-01-2000	YES
2021/02/02 1:21:06 PM	(Nandini N	nandiningowda8@gmail.com	Electronics	Female	08-12-1999	YES
2021/02/02 1:25:34 PM	(Roopesh Kumar C K	rk@dr-ait.org	Computer	Male	17-11-1998	YES
2021/02/02 1:28:50 PM	(Ranjan Raj	ranjanraj737@g	CSE	Male	28-10-1998	YES
2021/02/02 1:29:40 PM	(Aakriti Sah	aakreteeshah157@gmail.com	CSE	Female	15-07-2000	YES
2021/02/02 1:31:00 PM	(SHARATH B S	sharath.bs435@gmail.com	Computer	Male	28-07-1999	YES
2021/02/02 1:32:00 PM	(Mahima Shaini	mahimashaini@gmail.com	Electronics	Female	01-11-1999	YES
2021/02/02 1:32:49 PM	(Sunitha A G	agsunitha17@gmail.com	ECE	Female	09-01-1999	YES
2021/02/02 1:33:47 PM	(Shivakumar s k	skshivakumar99@gmail.com	Computer	Male	14-02-1999	YES
2021/02/02 1:40:25 PM	(OMKAR CHAVAN	omkarchavan50@gmail.com	Electronics	Male	14-03-1999	YES
2021/02/02 1:57:05 PM	(Varun Kumar G	varunkuma3214@gmail.com	ECE	Male	14-02-2000	YES
2021/02/02 2:01:38 PM	(Sourabh R	sourabhraobharadwaj@gmail.com	Cse	Male	25-11-1999	YES
2021/02/02 2:15:46 PM	(V M HARIPRIYA	vm.haripriya1@gmail.com	MEDICAL E	Female	06-10-1999	YES
2021/02/02 2:20:01 PM	(Sambit Sanyal	sambit.sanyal99@gmail.com	Computer	Male	02-01-1999	YES
2021/02/02 2:25:54 PM	(Divyashree U	divyadevadiga1499@gmail.com	ECE	Male	14-04-1999	YES
2021/02/02 2:48:33 PM	(Vishakha Bhat	vishubhat013@gmail.com	ECE	Female	28-08-1999	YES

About the Organization

Dr. Ambedkar Institute of Technology is managed By Panchajanya Vidya Peetha Welfare Trust(Regd.) was established by Late Sri M.H.Jayaprakash Narayan in 1979. The institute is affiliated to Visveswaraya Technological University, Belagavi and is accredited by AICTE. The institution has been accredited by NBA, NAAC with 'A' grade and it is mentee instsitute for Institution of Engineering & Technology, Dr.Rammanohar Lohia Avad University, Faizabad, Uttar pradesh. Apart from the 10 disciplines of Engineering, the institute also offers MCA,MBA and M.Tech programs in various specializations. The institute is one among the 14 colleges selected for receiving the World Bank assistance under the Technical Education Quality Improvement Programme(TEQIP) through Governmnet of India.

Click below link for registration

<https://forms.gle/uCdw5X8oU38xVAAf9>

OR

Scan the following QR code



About the Training

As we are living in the world of connected devices and things, gaining the knowledge in the development of IoT which is future technology is the order of the day. The course focuses on intricacies involved in the development of IoT to prepare the candidates for the industrial standard technologies.

Course Outcomes

- Familiarize with the knowledge of IoT development.
- Design IoT based prototypes.
- Exposure to the open source tools for IoT .

Course Coordinators

Dr. Umadevi H, Professor,

9880324895

B.S.Sudha , Associate Professor,

9242363088

Girija S, Assistant Professor,

9986007870



Dr. AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathalli, Bengaluru-56

**TEQIP Assisted
Online Student Training
Future Skill Technology**



INTERNET OF THINGS (IoT)

22nd July 2020 to 30th September 2020

Instructions to the Candidates

- ❖ *The training of students shall be conducted during July – Sept 2020.*
- ❖ *Students may be allowed for necessary lab work / hands-on practice after lockdown in batches of appropriate size while following strict safety protocols and practicing social distancing.*
- ❖ *The students shall undergo formative progress review test conducted by NASSCOM midway during the training program*
- ❖ *Post training assessment and certification shall be conducted through SSC NASSCOM after the training.*

Topics to be covered

- *IoT Introduction and Fundamentals*
- *Signals*
- *Sensors, Actuators*
- *Interfaces*
- *Networking for IoT*
- *Cloud Computing in IoT*
- *Data Analysis for IoT applications*
- *Linear Regression and Clustering*
- *Practical session will be conducted for the IoT prototype designs for various application using open source tools*

Pre-requisites

- *Knowledge of microprocessor or microcontrollers.*
- *Basic Concepts of Communications.*
- *Programming knowledge.*

Registration

All the branches of the students are allowed to register for the course, as it is a interdisciplinary course.

- ❖ *Everyday the course is for 2 hours from Monday to Friday.*
- ❖ *Proctored exam will be conducted during the midway (2nd week of August)and at the end of the course.*
- ❖ *Session will be conducted through online mode and Learning Management System(LMS)*
- ❖ *Assignment and practice quiz will conducted after every session.*
- ❖ *Register at the earliest as the registration is based on first come basis.*

Futuristic skills Training on Internet of Things (IoT)

Course Title: Internet of Things (IoT)
Targeted groups: *B.E Students*

Date: 22-July-2020
Training Period: July-2020 – September-2020

OBJECTIVES:

The objective of the course is to instil the knowledge required for the design and development of the Internet of Things to cater to the industrial expectations.

LEARNING OUTCOMES:

After the completion of this course, the students will be able to:

1. Understand the basic requirement of the IoT.
2. Analyze the different signals, sensors, actuators and interfaces to adopt for the design.
3. Study of the networking model in accordance with IoT.
4. Data analytics if the information acquired using various approaches.
5. Design of an IoT for the industrial application.

CONTENTS:

Module 1: IoT Introduction and Fundamentals (6 hrs)	
1	Deciphering the term IoT Applications where IoT can be deployed Benefits/Challenges of deploying an IoT IoT components: Digital Signal Processing, Data transmission, Choice of channel (wired/wireless), back-end data analysis. Understanding packaging and power constraints for IoT implementation.
Module 2: Signals, Sensors, Actuators, Interfaces (17hrs)	
2	Sensors: types, signal types, shape and strength, Actuator Sensor non-idealities: Sensitivity and offset drift, noise, minimum detectable signal, nonlinearity
3	Read-out circuits: Instrumentation-amplifier, SNR definition, noise-bandwidth-power trade-off
4	Circuit component mismatch and mitigation techniques and Interface (calibration, chopping, auto-zeroing etc.)

5	Power/energy considerations
6	Basic Signal Processing (filtering, quantization, computation, storage)

Module 3: Networking and Cloud Computing in IoT (19 hrs)	
7	Review of Communication Networks, Challenges in Networking of IoT Nodes, range, bandwidth
8	Machine-to-Machine (M2M) and IoT Technology Fundamentals, Medium Access Control (MAC) Protocols for M2M Communications
9	Standards for the IoT
10	Basics of 5G Cellular Networks and 5G IoT Communications, Low-Power Wide Area Networks (LPWAN)
11	Wireless communication for IoT: channel models, power budgets, data rates
12	IoT Security and Privacy, MQTT Protocol, Publisher and Subscriber Model
13	Cloud computing platform (open source) and local setup of such environment
14	Embedded software relevant to microcontroller and IoT platforms (enterprise or consumer), user interfaces
Module 4: Data Analysis for IoT applications (8 hrs)	
15	Statistics relevant to large data
16	Linear regression
17	Basics of clustering, classification

LIST OF PRACTICALS:

Text and Reference Books:

1. David Hanes, Gonzalo Salgueiro, Patrick Grossetete, Robert Barton, Jerome Henry, "IoT Fundamentals: Networking Technologies, Protocols, and Use Cases for the Internet of Things", 1 st Edition, Pearson Education (Cisco Press Indian Reprint). (ISBN: 978-9386873743)
2. Srinivasa K G, "Internet of Things", CENGAGE Learning India, 2017
3. Vijay Madiseti and Arshdeep Bahga, "Internet of Things (A Hands –on Approach)", 1 st Edition, VPT, 2014. (ISBN: 978-8173719547)
4. Raj Kamal, "Internet of Things: Architecture and Design Principles", 1st Edition, McGraw Hill Education, 2017. (ISBN: 978-9352605224)

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Name

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Prasad shekhar naik
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Srikanth R V
Rachana M
Anusha M
Roopashree B R
Pooja C T
Varun Kumar G
Nonitha C
Sandhya M V
Naveen Kumar GN
Shaikh Shadab Hossain
DIVYA YADAV NE
Shilpa M
Deeksha Pai M
Madhushree M
Rachitha C
Sneha.P
Yatish A
SAKSHI SHARMA
SACHIN B
MOHITH PRAJWAL M
YASHASWINI R
Heena M
Sowndarya B A
Vinutha M
Mohnish S
Vennela ks
Devika U
Prashanth Raj C S
S Vaishnavi
Basavaraju M
Shreyas S
Suhas S Kashyap
SUMUKHA M
Jayanth Kumar K
Darshan.V
Jagada u mahesh
J. POOJA
Geetha Gowda
Monisha M
Jayashree K S

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Futuristic Skills Training under TEQIP-III Through NPIU

on

Internet of Things (IOT)

SCHEDULE

From 22.07.2020 to 30.09.2020

<i>Date</i>	<i>Time</i>	<i>Sessions</i>	<i>Topic</i>	<i>Trainer</i>	<i>Venue /Teaching Methodology</i>
22-07-2020	10.30 -11.30 AM	-	Inauguration	Principal,TEQ IP Coordinator and HOD	Seminar Hall C-302
	11.30 -12.30 PM	Session 1	Module 1:- IoT Introduction and Fundamentals: - Deciphering the term IoT, Applications where IoT can be deployed	Girija.S	Seminar Hall C-302
23-07-2020	10.30 -11.30 PM	Session 2	Benefits/Challenges of deploying an IoT	Girija.S	Seminar Hall C-302
	11.30 -12.30 PM	Session 3	IoT components	Girija.S	Seminar Hall C-302
24-07-2020	10.30 -11.30 PM	Session 4	Digital Signal Processing,	Girija.S	Seminar Hall C-302
	11.30 -12.30 PM	Session 5	Data transmission, Choice of channel (wired/wireless)	Girija.S	Seminar Hall C-302
27-07-2020	10.30 -11.30 PM	Session 6	Back -end data analysis, Understanding packaging and power constraints for IoT implementation.	Girija.S	Seminar Hall C-302
	11.30 -12.30 PM	Session 7	Module 2:- Signals, Sensors, Actuators, Interfaces :- Sensors: types	B S Sudha	Seminar Hall C-302

28-07-2020	10.30 -11.30 PM	Session 8	Sensors: types	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 9	signal types, shape and strength	B S Sudha	Seminar Hall C-302
29-07-2020	10.30 -11.30 PM	Session 10	Actuator applications	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 11	Sensor non-idealities: Sensitivity and offset drift ,	B S Sudha	Seminar Hall C-302
30-07-2020	10.30 -11.30 PM	Session 12	Noise, minimum detectable signal, nonlinearity.	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 13	Read-out circuits: Introductions, Instrumentation-amplifier.	B S Sudha	Seminar Hall C-302
30-07-2020	10.30 -11.30 PM	Session 14	SNR definition , noise-bandwidth-power trade-off.	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 15	Circuit component mismatch and mitigation	B S Sudha	Seminar Hall C-302
31-07-2020	10.30 -11.30 PM	Session 16	Techniques and Interface (calibration, chopping, auto-zeroing etc.)	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 17	Techniques and Interface (calibration, chopping, auto-zeroing etc.)	B S Sudha	Seminar Hall C-302
3-08-2020	10.30 -11.30 PM	Session 18	Power/energy considerations	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 19	Power/energy considerations	B S Sudha	Seminar Hall C-302
4-08-2020	10.30 -11.30 PM	Session 20	Introduction to,Basic Signal Processing (filtering, quantization, computation, storage)	B S Sudha	Seminar Hall C-302
	11.30 -12.30 PM	Session 21	Introduction to,Basic Signal Processing (filtering, quantization, computation, storage)	B S Sudha	Seminar Hall C-302
5-08-2020	10.30 -11.30 PM	Session 22	Introduction to,Basic Signal Processing (filtering, quantization, computation, storage)	B S Sudha	Seminar Hall C-302

	11.30 -12.30 PM	Session 23	Introduction to,Basic Signal Processing (filtering, quantization, computation, storage)	B S Sudha	Seminar Hall C-302
10-08-2020	10.30 -11.30 PM	Session 24	Module 3:-Networking and Cloud Computing in IoT (19hrs)	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 25	Review of Communication Networks Nodes,	Dr Umadevi H	
11-08-2020	10.30 -11.30 PM	Session 26	Review of Communication Networks Nodes,	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 27	Challenges in Networking of IoT	Dr Umadevi H	Seminar Hall C-302
12-08-2020	10.30 -11.30 PM	Session 28	Challenges in Networking of IoT	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 29	Range, bandwidth requirements for IoT	Dr Umadevi H	Seminar Hall C-302
13-08-2020	10.30 -11.30 PM	Session 30	Range, bandwidth requirements for IoT	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 31	Machine-to-Machine (M2M) and IoT Technology Fundamentals,	Dr Umadevi H	Seminar Hall C-302
14-08-2020	10.30 -11.30 PM	Session 32	Machine-to-Machine (M2M) and IoT Technology Fundamentals,	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 33	Basics of 5G Cellular Networks,	Dr Umadevi H	Seminar Hall C-302
17-08-2020	10.30 -11.30 PM	Session 34	5G use cases, 5G introduction	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 35	key 5G Technologies	Dr Umadevi H	Seminar Hall C-302
18-08-2020	10.30 -11.30 PM	Session 36	5G IoT Communications, Low power wide area network.	Dr Umadevi H	Seminar Hall C-302
	11.30 -12.30 PM	Session 37	5G deployment, 5G projects	Dr Umadevi H	Seminar Hall C-302
19-08-2020	10.30 -11.30 PM	Session 38	Wireless communication for IoT: channel models, power budgets, data rates	Dr Umadevi H	Seminar Hall C-302

	11.30 -12.30 PM	Session 39	IoT Security and Privacy,	Girija S	Seminar Hall C-302
20-08-2020	10.30 -11.30 PM	Session 40	MQTT Protocol, Publisher and Subscriber Model Cloud computing platform	Girija S	Seminar Hall C-302
	11.30 -12.30 PM	Session 41	Embedded software relevant to microcontroller and IoT platforms (enterprise or consumer), user interfaces	Girija S	Seminar Hall C-302
21-08-2020	10.30 -11.30 PM	Session 42	Embedded software relevant to microcontroller and IoT platforms (enterprise or consumer), user interfaces	Girija S	Seminar Hall C-302
	11.30 -12.30 PM	Session 43	Embedded software relevant to microcontroller and IoT platforms (enterprise or consumer), user interfaces	Girija S	Seminar Hall C-302
24-08-2020	10.30 -11.30 PM	Session 44	Module 4:- Introduction to Statistics relevant to large data	Girija S	Seminar Hall C-302
	11.30 -12.30 PM	Session 45	what is Big Data and its characteristics	Girija S	Seminar Hall C-302
25-08-2020	10.30 -11.30 PM	Session 46	Role of Analytics in IOT	Girija S	Seminar Hall C-302
	11.30 -12.30 PM	Session 47	Introduction to Linear regression and its analysis	Girija S	Seminar Hall C-302
26-08-2020	10.30 -11.30 PM	Session 48	First order linear model, error variable, scatter plot.	Girija S	Seminar Hall C-302
	11.30 -12.30 PM	Session 49	Basics of clustering, supervised and unsupervised clustering	Girija S	Seminar Hall C-302
27-08-2020	10.30 -11.30 PM 11.30 -12.30 PM	Session 50	Supervised and unsupervised classification, clustering verses classification.	Girija S	Seminar Hall C-302
28-08-2020			Practical Session will be held till 30.09.2020		

List of Trainers

1	Dr Umadevi H Professor , Dept. of ECE, Dr.AIT	Email : umadevi.h@dr-ait.org , Mobile no. : 9880324895	
2	Sudha BS Associate Professor,Dept. of ECE, Dr.AIT	Email : sudha.bs@dr-ait.org , Mobile no. : 9242363088	
3	Girija S Assistant Professor,Dept. of ECE. Dr.AIT Bengluru-56.	Email : girija.s@dr-ait.org , Mobile no. : 9986007870	

Course:- Internet of Things

Student Attendance

Sl. No.	Student Name	USN	22-07-2020	23-07-2020	23-07-2020	24-07-2020
1	Aishwarya Kamakodi	1DA17EC007	1	2	3	4
2	Ajay s s	1DA17EC008	1	2	3	4
3	Anusha c s	1DA17EC012	1	2	3	4
4	Arpitha GR	1da17EC014	1	2	3	4
5	Arun Kumar Belamge	1DA17EC015	1	2	3	4
6	Bharath H U	1DA17EC023	1	2	3	4
7	Darshan V	1DA17EC032	1	2	3	4
8	Deepak T V	1DA17EC034	1	2	3	4
9	E Kishore	1DA17EC039	1	2	3	4
10	Gajan Gowda A B	1DA17EC040	1	2	3	4
11	Geetha Gowda	1DA17EC043	1	2	3	4
12	Harshitha L S	1DA17EC046	1	2	3	4
13	Harshitha M S	1DA17EC047	1	2	3	4
14	J. POOJA	1DA17EC048	1	2	3	4
15	Jayanth Kumar K	1DA17EC050	1	2	3	4
16	Keerthana R	1DA17EC057	1	2	3	4
17	Mamatha N	1DA17EC075	1	2	3	4
18	Naveen Kumar GN	1DA17EC083	1	2	3	4
19	Niveditha G V	1DA17EC088	1	2	3	4
20	Nonitha C	1DA17EC090	1	2	3	4
21	Prarthana B M	1DA17EC096	1	2	3	4
22	Prasad shekhar naik	1DA17EC097	1	2	3	4
23	Prashant Kumar	1DA17EC098	1	2	3	4
24	Rachana M	1DA17EC107	1	2	3	4
25	Rachitha C	1DA17EC108	1	2	3	4
26	Rajesh Rao R E	1DA17EC111	1	2	3	4
27	Rohith T N	1DA17EC116	1	2	3	4
28	Sanjay N J	1DA17EC123	1	2	3	4
29	Ruchitha Reddy V R	1DA17EC118	1	2	3	4
30	S Vaishnavi	1DA17EC119	1	2	3	4
31	SHAIK HUSSAIN	1DA17EC124	1	2	3	4
32	Shreyas H K	1DA17EC131	1	2	3	4
33	Shreyas S	1DA17EC132	1	2	3	4
34	Shwetha G	1DA17EC133	1	2	3	4
35	Sunitha A G	1DA17EC139	1	2	3	4
36	Syedda Arshiya Taj	1DA17EC141	1	2	3	4
37	Varun Kumar G	1DA17EC147	1	2	3	4

38	Abhishek p patil	1DA18EC403	1	2	3	4
39	Sangeetha C	1DA18EC439	1	2	3	4
40	Ajaykumar S	1DA17TE001	1	2	3	4
41	AJAY V	1DA17TE002	1	2	3	4
42	Akshatha S	1DA17TE003	1	2	3	4
43	Akshay P	1DA17TE004	1	2	3	4
44	Anusha.S	1DA17TE005	1	2	3	4
45	Chaitra K N	1DA17TE009	1	2	3	4
46	Chandana L	1DA17TE010	1	2	3	4
47	G M LIKHITH	1DA17TE015	1	2	3	4
48	Harshith V R	1DA17TE017	1	2	3	4
49	HARSHITHA M S	1DA17TE018	1	2	3	4
50	Jagruth S	1DA17TE019	1	2	3	4
51	Jayashree K S	1DA17TE021	1	2	3	4
52	MANASWINI N S	1DA16TE024	1	2	3	4
53	Manjushree R	1DA17TE025	1	2	3	4
54	Monisha M	1DA17TE027	1	2	3	4
55	Murthy M N	1DA17TE029	1	2	3	4
56	Nayana N	1DA17TE031	1	2	3	4
57	NOOR FATHIMA S	1DA17TE032	1	2	3	4
58	Pavithra H K	1DA17TE034	1	2	3	4
59	Pragathi N	1DA17TE039	1	2	3	4
60	Rachana sl	1DA17TE041	1	2	3	4
61	Rakshitha BS	1DA17TE042	1	2	3	4
62	RAMYA N	1DA17TE043	1	2	3	4
63	Swaraj H S	1DA17TE049	1	2	3	4
64	VINAY B R	1DA17TE051	1	2	3	4
65	Ajith kumar R	1DA18TE401	1	2	3	4
66	Pavan Kumar T M	1DA18TE409	1	2	3	4
67	Ramya S	1DA18TE412	1	2	3	4
68	Ankitha Bhat	1DA17CS019	1	2	3	4
69	Anusha M	1DA14CS019	1	2	3	4
70	Bharath B M	1DA17EC024	1	2	3	4
71	Bhoomika B Shastry	1DA17CS027	1	2	3	4
72	K Aditya	1DA17CS060	1	2	3	4
73	Keerthan HS	1DA17CS063	1	2	3	4
74	KIRTHI K	1DA17CS064	1	2	3	4
75	Kruthi Katte	1DA17CS065	1	2	3	4
76	Lavanya S	1DA17CS070	1	2	3	4
77	REKHA S KUMAR	1DA16CS111	1	2	3	4
78	Sahana S	1DA17CS145	1	2	3	4
79	Sathwik VU	1DA17CS151	1	2	3	4
80	Shreya S	1DA17CS158	1	2	3	4
81	Santosh Pipalwa	1DA17CS423	1	2	3	4

82	SYED WASEEM	1DA18CS435	1	2	3	4
83	VINODH R	1DA17IS046	1	2	3	4
84	Himaraj	1DA18IS404	1	2	3	4
85	Brundha.P	1DA18IS400	1	2	3	4
86	Jagada u mahesh	1DA17EI021	1	2	3	4
87	Jayashree Y	1DA17EI022	1	2	3	4
88	SAKSHI SHARMA	1DA17EI039	1	2	3	4
89	Neha Kulsum S	1DA17EE028	1	2	3	4
90	Yashaswini S	1DA17EE053	1	2	3	4

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DATE: 23/02/2021

From,

Shwetha M

Assistant Professor

Dept. of ECE, Dr AIT,

Bengaluru

To,

The Principal,

Dr. Ambedkar Institute of Technology,

Bengaluru - 56.

Respected Sir,

Sub: Requisition for remuneration upon completion of handling Future Skill training program for students on “Internet of Things “course- reg

With respect to the above subject, I would like to bring to your kind notice that as per the directions of the NPIU and TEQIP III, Dr AIT, I have handled classes for students related to Future Skill Training Program for “Internet of Things “course from 10th March to 24th March 2021. Total classes and labs handled are 45. I am here by submitting the associated documents for kind consideration and to kindly release the permitted remuneration as per TEQIP-III.

Kindle consider and please do the needful.

With regards,

Your's Sincere
Shwetha M



Dr.AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathahalli, Bengaluru-56

Dept. of Electronics and Communication Engineering

TEQIP-III Assisted

Future Skill Training on

“Internet of Things”

10th March 2021 to 24th March 2021

NPIU

National Project Implementation Unit

Course Objective

1. To provide necessary foundation on Computer communication.
2. Impart necessary knowledge about Internet of Things and its importance.
3. Developing programming skills to code solution for practical problems.
4. To build Internet of things applications.

Shwetha M

Assistant Professor

Dept of ECE, Dr AIT



Dr.AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathahalli, Bengaluru-56

Dept. of Electronics and Communication Engineering

TEQIP-III Assisted

Future Skill Training on

“Internet of Things”

10th March 2021 to 24th March 2021

NPIU

National Project Implementation Unit

Course Learning Outcomes

1. Interpret the impact and challenges posed by IoT networks leading to new architectural models.
2. Compare and contrast the deployment of smart objects and the technologies to connect them to network.
3. Appraise the role of IoT protocols for efficient network communication.
4. Analyse higher layer IoT Protocols.
5. Elaborate the need for Data Analytics

Shwetha M

Assistant Professor

Dept of ECE, Dr AIT



Dr.AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathahalli, Bengaluru-56

Dept. of Electronics and Communication Engineering

TEQIP-III Assisted

Future Skill Training on

“Internet of Things”

10th March 2021 to 24th March 2021



Report Summary

Ms. Shwetha M was trained online by IIT Bombay from 23rd Feb 2021 to 27th Feb 2021 on “Internet of Things” under Future Skill Technologies. This is a report on Internet of Things course initiated by NPIU.

Ms. Shwetha has handled classes of 45 hours on internet of things as on 24th March 2021. The main concepts covered in this course are IoT Introduction and Fundamentals, Signals, Sensors, Actuators, Interfaces, Networking and Cloud Computing in IoT and Data Analysis for IoT applications.

The hands-on sessions will be held using python on Jupiter platform in the next sessions as the students need to take both mid-term and final assessment exams. Those details will be provided later.

The training was conducted in a blended mode by the resource person Ms. Shwetha. M. The course objective/s is to provide necessary foundation on networks, knowledge about Internet of Things, programming skills and its applications.

As a course outcome/s, students will be able to do projects under Internet of Things, undertake internships on that topic, can relate and implement Internet of Things on various applications models.



Dr.AMBEDKAR INSTITUTE OF TECHNOLOGY

BDA Outer Ring Road, Mallathahalli, Bengaluru-56

Dept. of Electronics and Communication Engineering

TEQIP-III Assisted

Future Skill Training on

“Internet of Things”

10th March 2021 to 24th March 2021

NPIU

National Project Implementation Unit

Day	Hours	Classes	Topics Covered
10-3-2021	3	1	IoT :Introduction and Fundamentals
		2	Fundamentals of IoT
		3	Fundamentals of IoT
11-3-2021	3	4	Deciphering the term IoT
		5	Applications where IoT can be deployed
		6	Applications where IoT can be deployed
12-3-2021	3	7	Applications where IoT can be deployed
		8	Benefits of deploying an IoT
		9	challenges of deploying an IoT
13-3-2021	3	10	IoT components: Sensors
		11	front-end electronics (amplifiers, filtering, digitization
		12	front-end electronics (amplifiers, filtering, digitization)
14-3-2021	3	13	data transmission
		14	digital signal processing,

		15	choice of channel (wired/wireless)
15-3-2021	3	16	back-end data analysis
		17	Understanding packaging and power constraints for IoT implementation
		18	Sensors: types, signal types, shape and strength
		19	Sensor non-idealities: Sensitivity and offset drift
16-3-2021	3	20	noise, minimum detectable signal, nonlinearity
		21	Read-out circuits: Instrumentation-amplifier
		22	SNR definition, noise-bandwidth-power Tradeoff
17-3-2021	3	23	Circuit component mismatch
		24	mitigation techniques (calibration, chopping, autozeroing etc.)
		25	Power/energy considerations
18-3-2021	3	26	Basic signal processing (filtering, quantization, computation, storage)
		27	Review of Communication Networks
		28	Challenges in Networking of IoT Nodes, range, bandwidth
19-3-2021	3	29	Machine-to-Machine (M2M) and IoT Technology Fundamentals,
		30	Medium Access Control (MAC) Protocols for M2M Communications 2 of 2
		31	Standards for the IoT
20-3-2021	3	32	Basics of 5G Cellular Networks
		33	5G IoT Communications, Low-Power Wide Area
		34	Networks (LPWAN)
21-3-2021	3	35	Wireless communication for IoT: channel models
		36	power budgets, data rates
		37	IoT Security and Privacy, MQTT Protocol,
22-3-2021	3	38	Publisher and Subscriber Model

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Dr. Ambedkar Institute of Technology
Outer Ring Road, Mallathahalli, Bengaluru-560056

NPIU
National Program Implementation Unit

Department of Electronics and Communication Engineering
HOD, Faculty and Students of ECE
Cordially invite you for the Inauguration of

"Finishing School - Parivarthan"
College campus to corporate program
On

6th February 2019
Under TEQIP-III

Chief Guest

Suma Vasanth

Leadership Master Trainer, Coach, Mentor, Founder & CEO of

LeadNImpire

Presided By

Sri.S.Mariswamy

Hon'ble Chairman, PVP Welfare Trust

Guests of Honour

Sri.A.R.Krishnamurthy

Hon'ble Secretary/Managing Trustee, PVP Welfare Trust

Sri.P.L.Nanjundaswamy

Hon'ble Treasurer, PVP Welfare Trust

Sri. S.Shivamallu

Hon'ble Trustee, PVP Welfare Trust

Dr.M.Mahadeva

Hon'ble Trustee, PVP Welfare Trust

Dr.C.Nanjundaswamy
Principal

Dr. M Meenakshi
Dean(Academics)

Dr.Mahalinga Mandi
Coordinantor. TEQIP-III

Dr.G.V.Jayaramaiah
Professor and HOD, Chief Coordinator

Coordinator(s)

Kavitha Devi C.S
Assistant Professor,ECE

Harsha.R
Assistant Professor,ECE

Time:9.30 a.m

Venue Seminar Hall , Dept of ECE

TEQIP-III SPONSORED
"Three days Workshop on Finishing School -
Parivarthan
"

FEB 18th-20th, 2019

REGISTRATION FORM

Name (in capital): GI. PREETHI

Designation: STUDENT

Department: ECE

Institution: Dr. AIT

Telephone/Mobile: 7796457764

E-Mail: preethipada3a@gmail.com

Category of Registration (please tick)

☒ UG/Faculty ☐

Declaration

I hereby declare that the information furnished above is true to the best of my knowledge

Signature of Applicant

Signature of HOD/Principal

TEQIP-III SPONSORED
Three Days Workshop
On
"Finishing School - Parivarthan"

FEB 18th-20th, 2019



NPIU
National Institute of Professional
University



Chief-Coordinator

Dr. G. V. Jayaramiah
Professor & HOD

Coordinators

Kavitha Devi C.S.
Assistant Professor

Kavyashivashankar

Assistant Professor

Department of Electronics and Communication

ABOUT THE INSTITUTE:
Dr. Ambedkar Institute of Technology (Dr. AIT) is managed by Panchajanya Vidya Pectra Welfare Trust. The trust is managing a number of educational institutions in Bengaluru.

Dr. AIT was established in 1980 by Late Sri. M.H. Jayaprakash Narayan, our Institute is one among the 14 colleges selected for receiving the World Bank financial Assistance under Technical Education Quality Improvement Program (TEQIP) through Government of India. The Institute is the recipient of several grants sanctioned by AICTE, DST and VTU. The Institute is granted autonomous status by UGC WEF 2010-11. The institute is accredited by NBA, NMAC (A Grade) and a recipient of World Bank assistance under Technical Education Quality Improvement Program (TEQIP-I, II and III).

ABOUT THE DEPARTMENT:

The Department came under grant-in-aid scheme of Government of Karnataka in 1992. The UG course was started in the year 1982 with an intake of 60 and presently UG program intake is 180. Staffs are highly qualified and are also the members of prestigious professional bodies like IEEE, ISTE, SSL, and CSI. IEEE Students Chapter has been setup. Students have participated and won prizes in intercollegiate technical activities.

OBJECTIVES OF WORKSHOP:

The objectives of the Campus to Corporate finishing school program is to bridge the gap between the Campus and the Corporate Culture. The program gives the students a peek at what the Corporates expect when they graduate and join their company.

CHIEF PATRONS:

Sri. S. Mariswamy
Hon'ble Chairman, PVP Welfare Trust

Sri. A. R. Krishnamurthy
Hon'ble Secretary/Mangaling Trustee
PVP Welfare Trust

Sri. P. L. Nanjundaswamy
Treasurer, PVP Welfare Trust

Shri. S. Shivamallu
Trustee, PVP Welfare Trust

Dr. M. Mahadeva
Trustee, PVP Welfare Trust

PATRONS:

Dr. C. Nanjundaswamy
Principal, Dr. AIT

Dr. M. Meenakshi
Dean(A), Dr. AIT

Dr. Mahalinga V Mandi
Coordinator,
TEQIP - III, Dr. AIT

RESOURCE PERSONS:

Suma Vasanth, Leadership Master
Trainer, Coach, Mentor, Founder & CEO
of LeadNInspire, 25+ years of Global
Corporate experience with IT giants

R. Srinath, Trainer, Co-founder
LeadNInspire, successful entrepreneur

Rajeev BV, Software profession, soft skills
trainer

Organizing committee

Dr. Umadevi H
Professor, Department of ECE
Dr. Ambedkar Institute of Technology

B. S. Sudha
Assistant Professor, Department of ECE
Dr. Ambedkar Institute of Technology

Meenakshi L. Rathod
Assistant Professor, Department of ECE
Dr. Ambedkar Institute of Technology

Tanuja Patgar
Assistant Professor, Department of ECE
Dr. Ambedkar Institute of Technology

Vidyaashree C
Assistant Professor, Department of ECE
Dr. Ambedkar Institute of Technology

Date: 18th to 20th April 2018

Venue:
Silver jubilee Hall, Dr. Ambedkar Institute of
Technology

Registration Fee:

Students (UG): NIL

Mailing address for all correspondence:

Dr. G.V. Jayaramaiah
Professor,
Department of
Electronics and Communication Engineering
Dr. Ambedkar Institute of Technology
Email: gviayaram@gmail.com

Dr.AMBEDKAR INSTITUTE OF TECHNOLOGY

(An Autonomous Institution, Aided by Government of Karnataka, Affiliated to Visvesvaraya Technological University, Belagavi), Near JnanaBharathi Campus, Mallathahalli, Bengaluru – 560 056

Department of Electronics and Communication Engineering



NPIU

National Project Implementation Unit

CERTIFICATE

This is to certify that Mr/Ms....., of Semester, Department Of Electronics and Communication Engineering, Dr AIT Bengaluru 560056 has participated in TEQIP- III Sponsored three days' workshop on *"Finishing School- Parivarthan"* which was held from 18 February 2019 Monday to 20 February 2019 Wednesday at Dr Ambedkar Institute of Technology, Bengaluru.

Kavitha Devi C.S

Assistant Professor, Dept. of ECE

Harsha R

Assistant Professor, Dept. of ECE

Kavya shivashankar

Assistant Professor, Dept. of ECE

Dr. G. V. Jayaramaiah
Professor. & Head, Dept. of ECE

Chief coordinator

Dr. C. Nanjundaswamy
Principal, Dr. A.I.T., Bengaluru

Finishing School – Parivarthan” STUDENT LIST

SL.NO	STUDENT NAME	REGISTER NO	Date	18/02/2019 DAY 1	19/02/2019 DAY 2	20/02/2019 DAY 3
1	Bhargavi. N. Shetty	IDA16EC024	3A	Bhargavi. N. Shetty	Bhargavi. N. Shetty	Bhargavi. N. Shetty
2	Vishakha Bhat	IDA16EC155	3C	Vishakha Bhat	Vishakha Bhat	Vishakha Bhat
3	Chinnay. A.	IDA16EC029	3B	Chinnay. A.	Chinnay. A.	Chinnay. A.
4	G. PREETHI	IDA16EC035	CM	G. PREETHI	G. PREETHI	G. PREETHI
5	Anagha. B. Nain	IDA16EC012	CM	Anagha. B. Nain	Anagha. B. Nain	Anagha. B. Nain
6	Kaam. P. Gouda	IDA16EC048	DA	Kaam. P. Gouda	Kaam. P. Gouda	Kaam. P. Gouda
7	Aiith Shabbhaya	IDA16EC010	CM	Aiith Shabbhaya	Aiith Shabbhaya	Aiith Shabbhaya
26	Ummu Haan	IDA16EC133	2B	Ummu Haan	Ummu Haan	Ummu Haan
27	Shirya S. Zia	IDA16EC115	CM	Shirya S. Zia	Shirya S. Zia	Shirya S. Zia
28	Shirya S. Zia	IDA16EC148	CM	Shirya S. Zia	Shirya S. Zia	Shirya S. Zia
8	Abhinav. S. Sankar	IDA16EC003	2B	Abhinav. S. Sankar	Abhinav. S. Sankar	Abhinav. S. Sankar
9	Hita. Babu. R	IDA16EC009	CM	Hita. Babu. R	Hita. Babu. R	Hita. Babu. R
10	KARTHIK. S	IDA16EC050	CM	KARTHIK. S	KARTHIK. S	KARTHIK. S
11	Gaurav. G. S	IDA16EC036	3A	Gaurav. G. S	Gaurav. G. S	Gaurav. G. S
12	Pradum. A.	IDA16EC080	3A	Pradum. A.	Pradum. A.	Pradum. A.
13	Vaishnavi. A. J. Datta	IDA16EC134	CM	Vaishnavi. A. J. Datta	Vaishnavi. A. J. Datta	Vaishnavi. A. J. Datta
14	Vaishnavi. K. Vaidya	IDA16EC135	CM	Vaishnavi. K. Vaidya	Vaishnavi. K. Vaidya	Vaishnavi. K. Vaidya
29	Saanya. S	IDA16EC107	ST	Saanya. S	Saanya. S	Saanya. S
15	Saanya. S	IDA16EC103	ST	Saanya. S	Saanya. S	Saanya. S
16	Siddhant. M. G	IDA16EC118	3A	Siddhant. M. G	Siddhant. M. G	Siddhant. M. G
17	Bharath. B. R	IDA16EC141	3A	Bharath. B. R	Bharath. B. R	Bharath. B. R
18	Sinchana. B	IDA16EC119	3C	Sinchana. B	Sinchana. B	Sinchana. B
19	Tyushini. P. C	IDA16EC130	3A	Tyushini. P. C	Tyushini. P. C	Tyushini. P. C
20	Tyushini. P. C	IDA16EC189	2A	Tyushini. P. C	Tyushini. P. C	Tyushini. P. C
21	Shruti. C. M	IDA16EC124	2A	Shruti. C. M	Shruti. C. M	Shruti. C. M
22	Thamshree	IDA16EC131	3A	Thamshree	Thamshree	Thamshree
23	Y. Abhi. Anek	IDA16EC140	CM	Y. Abhi. Anek	Y. Abhi. Anek	Y. Abhi. Anek
24	Vanishree. S	IDA16EC136	3A	Vanishree. S	Vanishree. S	Vanishree. S
25	Baivatsa	IDA16EC123	CM	Baivatsa	Baivatsa	Baivatsa

Finishing School – Parivarthan" STUDENT LIST

34-01
3B-02
2A-04
2B-01
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SC-02

SL.NO	STUDENT NAME	REGISTER NO	DATE	18/02/2019 DAY 1	19/02/2019 DAY 2	20/02/2019 DAY 3
01	Sachin. S.F	1DA16EC101	SC 3A	Sachin	Sachin	Sachin
02	Keethi. Smtly	1DA16EC055	SC 2A	Keethi	Keethi	Keethi
03	Mehith. N	1DA16EC068	SC	Mehith	Mehith	Mehith
04	Prasool. B.J	1DA16EC081	SC	Prasool	Prasool	Prasool
05	Shalath. N	1DA16EC106	SC	Shalath	Shalath	Shalath
06	Sandip. SA	1DA16EC102	SC 3A	Sandip	Sandip	Sandip
07	Ranjith. R	1DA16EC095	SC	Ranjith	Ranjith	Ranjith
08	Mandeel. V	1DA16EC064	SC	Mandeel	Mandeel	Mandeel
09	Poornima. CM	1DA16EC078	CM	Poornima	Poornima	Poornima
10	Gautham. O	1DA16EC037	SC	Gautham	Gautham	Gautham
11	Ariyana. B.R	1DA16EC013	SC	Ariyana	Ariyana	Ariyana
12	Vikas. di	1DA16EC138	SC	Vikas	Vikas	Vikas
13	Anand. Nishayap	1DA16EC143	SC	Anand	Anand	Anand
14	Srinivasa. V	1DA16EC122	SC	Srinivasa	Srinivasa	Srinivasa
15	S. Srinivasa. M.S.	1DA16EC019	CM	S. Srinivasa	S. Srinivasa	S. Srinivasa
16	Ashika. V	1DA16EC115	CM	Ashika	Ashika	Ashika
17	Chirya. S	1DA16EC133	SC	Chirya	Chirya	Chirya
18	Ummu Haasi	1DA16EC107	SC	Ummu Haasi	Ummu Haasi	Ummu Haasi
19	Sheranya	1DA16EC148	CM	Sheranya	Sheranya	Sheranya
20	Sukanya Titus	1DA16EC105	SC	Sukanya	Sukanya	Sukanya
21	Senthil. N.J	1DA19EC123	SC	Senthil	Senthil	Senthil
22	Veda. M.V	1DA19EC432	SC	Veda	Veda	Veda
23	Pooja	1DA16EC404	SC	Pooja	Pooja	Pooja
24	Sujatha. S. Kanyar	1DA19EC429	CM	Sujatha	Sujatha	Sujatha

30 - 0.1
38 - 0.1
30 - 0.1
20 - 0.1
25 - 0.1
57 - 0.1

94-48 3C-02 SC-05
 3A-26 2A-20 ST-02
 3B-11 2B-07 OBC-1

Sc-01, ST-01