

ಎಮ್ ಎಸ್ ರಾಮಯ್ಯ ಕಲಾ, ವಿಜ್ಞಾನ ಮತ್ತು ವಾಣಿಜ್ಯ ಕಾಲೇಜು M S Ramaiah College of Arts, Science and Commerce Re-accredited 'A' by NAAC, Permanently Affiliated to Bengaluru City University. Approved by Government of Karnataka, Approved by AICTE, New Delhi, Recognized by UGC under 2f & 12B of UGC act 1956 (National Institutional Ranking Framework, Ministry of Education, Govt of India) Ranked 62rd in NIRF India Ranking by MHRD, New Delhi DBT Star College Scheme

Ref: MSRCASC/CSc/21-22/012

Date: 13/12/2021

CIRCULAR

Department of Computer Science

This is to inform to all the BCA I semester students that the department has planned to conduct a Value added course on **"Internet of Things- IOT"** from 5th to January 2022. Students who are interested can enrol your names to Mrs Haripriya G S on or before 24th December 2021.The resource person is Mr. Abhishek K.L, Asst. Professor, Department of Master of Computer Applications, MSRIT, Bengaluru.

HOIS 12/21

Head Of The Department Of Computer Science M. S. Ramaiah College Of Arts Science And Commerce MSRIT Post, Bangalore - 560 054

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M.S. Ramaiah College of Arts, Science & Commerce MSRIT Post, MSR Nagar

About The College

Ramaiah College of Arts, Science and Commerce was established in 1994 by our founder Late Dr. M S Ramaiah offering both under graduate and post graduate degrees offered by Bengaluru Central University approved by AICTE, New Delhi, recognized by the Government of Karnataka. The college is also recognized by UGC under 2f and 12b of UGC Act 1956, re-accredited "A" grade by NAAC and has ranked 62nd in a NIRF ranking and 1st among the best colleges of Karnataka

About The Department

The Computer Science Department of RCASC aims to educate students in the science and practice of IT. The emphasis is on hands on practical training of software development. The program enables the student to be updated on the latest revolution on technology and equips the students with the required skills and knowledge to assimilate into the industry at ease.

Objective & Outcome of the Program

Objective: To develop skills required for ML Technologies using Python to analyze data ,solving ML problems like Regression, Classification, and Clustering using ML algorithms.

Outcome: Understand how to evaluate models generated from data. Apply the algorithms to a real problem. Event Coordinator

Mrs Haripriya G S, Asst. Professor, MSRCASC

Patrons

Dr. M R Jayaram Chairman, GEF Sri M R Janakiram Director, GEF Sri M R Kodandaram Director, GEF Sri B S Ramprasad Chief Executive GEF(E & GS) Sri G Ramachandra Chief of Finance GEF(E &GS)

Organizing Committee

Dr A Nagarathna Principal, RCASC. Dr Prathiba V Kalburgi, HOD Mrs Suma C Assistant Professor Mr Lakshmipathi V Assistant Professor Mrs R Srividya, Assistant Professor Mrs Dhanashree Vaishali, Asst. Professor Mrs Shilpa Nayak Asst. Professor Mrs Savitri K Asst. Professor

Resource Person

Mr. Abhishek KL, Assistant Professor Department of Master of Computer Applications, MSRIT

Course Outline

The goal behind the Internet of things is to have devices that self report in real-time, improving efficiency and bringing important information to the surface more quickly than a system depending on human intervention





Department of Computer Science Organizes

Value Added Course On

" Internet of Things- IOT"



5th January to 3rd February 2022

Venue : Online Registration link: https://forms.gle/gzZTrVPHQCPaueC46 Meeting link : http://meet.google.com/ats-jxsk-xvx

Beneficiaries: First Year BCA Students

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(National Institutional Ranking Framework, Ministry of Education, Govt of India) Ranked 62rd In NIRF India Ranking by MHRD, New Delhi DBT Star College Scheme

Department of Computer science

Value added course

Title: "Internet of Things- IOT"

Date:5th January to3rdFebruary 2022

Venue: Online

Participants: I Year BCA students

Resource Person: Mr. Abhishek KL, Assistant Professor

Department of Master of Computer Applications, MSRIT

No of Students: 81

Event Coordinator: Hari Priya G S

Objective: Objective: To develop skills required for ML Technologies using Python to analyze data, solving ML problems like Regression, Classification, and Clustering using ML algorithms.

Course Outline -

The goal behind the Internet of things is to have devices that self-report in real-time, improving efficiency and bringing important information to the surface more quickly than a system depending on human intervention

This Value Added course is aim to provide additional learner skill oriented technical training with the primary objective of improving the employability skills of students. To bridge the skill gaps and make students industry ready.

The first day of the course started with by introducing the resource person Mr. Abhishek KL, Assistant Professor, Department of Master of Computer Applications, MSRIT to all the participants by Dr. Prathiba V K, HOD of Computer Science . Session started by giving the course outline and benefits of the course. He also explained the students about the high demand technologies in the industry and he suggested them to update the skills accordingly.

The growing emphasis on digital transformation is encouraging more organizations to adopt initiatives driven by the Internet of Things (IOT).

While such initiatives enable enterprises to enhance customer experiences, create new business channels, or acquire new partner ecosystems, gaining the insights to realize these benefits can prove to be challenging. The sheer volume of data that these devices generate,

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the variety of data that comes in, and the velocity in which data is collected creates its own set of challenges in terms of storage, processing power, and analytics for such enterprises.

The growth of IOT adoption has been exponential across all industries, but organizations within each industry face a unique set of challenges along this journey. Enterprises leveraging all the big data generated from IOT devices in their machine learning models are able to use prescriptive and predictive analytics to make well-informed decisions.

Several techniques used by the resource person which included questions and answer, brainstorming, group discussion, practical implementation of some of the topics to make sure all the participants get the whole concepts and they practise what they learn. First year students were understood about IOT and evaluating data modules relating to the algorithms and they understand the industry needs in the field of technology.

The last day session concluded with the presentation of a vote of thanks to the resource person Mr. Abhishek KL, Assistant Professor Department of Master of Computer Applications, MSRIT from Mrs. R. Srividya, senior faculty from the department of Computer Science. Two students also gave the feedback on the session. Students were validated with small test of 20 MCQ questions on the topics covered. Students will be awarded with a certificate.

Outcome: Understand how to evaluate models generated from data. Apply the algorithms to a real problem.

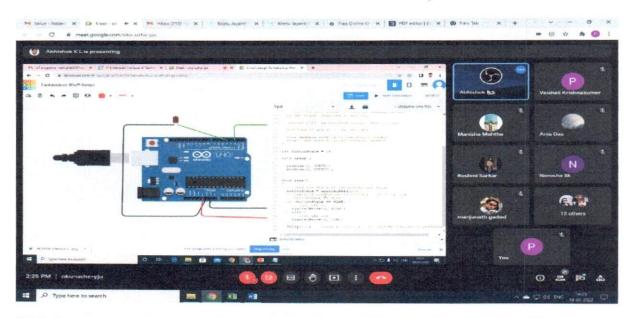
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Value added course IOT from 5th January 2022



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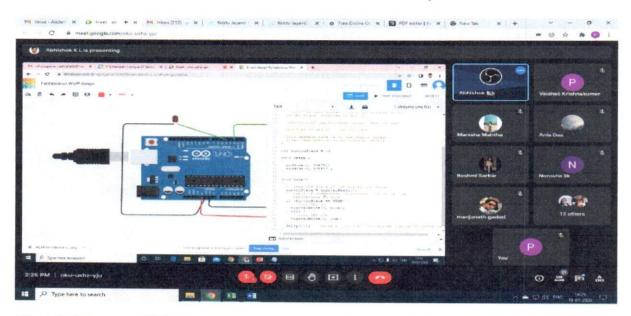
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Value added course IOT from 5th January 2022



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Department of Computer Science Value Added Course : Internet of Things- IOT

	Timestamp	Email address	Name	Register Number	Please select the semester you are currently studying
1	2-3-2022 11:33:35	veena197301@gmail.com	AARON V SULAKHE	21BCA001	1 st Sem
2	2-3-2022 12:28:19	abhigyanroy001@gmail.com	ABHIGYAN KUMAR ROY	21BCA002	1 st Sem
3	2-3-2022 11:29:05	abhimari.2001@gmail.com	ABHISHEK M	21BCA003	1 st Sem
4	2-3-2022 10:30:27	deeputtp@gmail.com	AJAY KRISHNAN H	21BCA004	1 st Sem
5	2-3-2022 10:31:39	akshayanoop65@gmail.com	AKSHAY A	21BCA005	1 st Sem
6	2-3-2022 1:31:59	amruthacvcsbat20@gmail.com	AMRUTHA C V	21BCA006	1 st Sem
7	2-3-2022 1:32:20	anamikamohan783@gmail.com	ANAMIKA MOHAN	21BCA007	
8	2-3-2022 10:32:52	anaswarasyamalan@gmail.com	ANASWARA S	21BCA008	1 st Sem
9	2-3-2022 10:33:41	lodhiarava19@gmail.com	ARAVA LOHITH	21BCA009	1 st Sem
10	2-3-2022 10:34:00	arju2222tvm@gmail.com	ARJUN KRISHNA J	21BCA010	1 st Sem
11	2-3-2022 10:34:10	aryadubey7644@gmail.com	ARYA DUBEY	21BCA011	1 st Sem
12	2-3-2022 11:34:12	ashishprabhu150@gmail.com	ASHISH UJJINI C P	21BCA012	1 st Sem
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15	2-3-2022 10:37:55	bhavyabedi21@gmail.com	BHAVYA BEDI	21BCA015	1 st Sem
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17	2-3-2022 10:38:37	bhumikashyam3009@gmail.com	BHUMIKA S	21BCA017	1 st Sem
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19	2-3-2022 10:39:03	deepakdion099@gmail.com	DEEPAK DION P	21BCA019	1 st Sem
20	2-3-2022 10:39:17	deepaksharadha@gmail.com	DEEPAK S	21BCA020	1 st Sem
21	2-3-2022 10:39:19	gopikadeepika313@gmail.com	DEEPIKA KRISHNA P C	21BCA021	1 st Sem
22	2-3-2022 10:39:23	DhanushKumarM003@gmail.com	DHANUSH KUMAR M	21BCA022	1 st Sem
23	2-3-2022 10:39:30	ferdinandbiju.13@gmail.com	FERDINAND JOY BIJU	21BCA023	1 st Sem
24	2-3-2022 10:39:45	deepskumar194@gmail.com	G K DEEPIKA	21BCA024	1 st Sem
25	2-3-2022 10:40:01	gaganayadav29@gmail.com	GAGANASHREE C	21BCA025	1 st Sem
26	2-3-2022 10:40:45	keshhavi.el@gmail.com	HARIKESH E L	21BCA026	1 st Sem
27	2-3-2022 10:41:06	ht177982@gmail.com	HARSH TIWARI	21BCA027	1 st Sem
28	2-3-2022 10:41:25	harshit.radakrishnan@gmail.com	HARSHIT R	21BCA028	1 st Sem
29	2-3-2022 10:41:58	hemanthbalakrishna24@gmail.com	HEMANTH B	21BCA029	1 st Sem
30	2-3-2022 10:49:50	jnvreddynvr@gmail.com	J NAGAVARDHAN REDDY	21BCA030	1 st Sem
31	2-3-2022 10:50:57	jatinssaraogi@gmail.com	JATIN SARAOGI	21BCA031	1 st Sem
32	2-3-2022 10:51:08	jeevitharamesh0123@gmail.com	JEEVITHA K R	21BCA032	1 st Sem
33	2-3-2022 10:51:20	jessonkroji18@gmail.com	JESSON SAMUEL ROJI	21BCA033	1 st Sem
34	2-3-2022 10:51:27	gkavana006@gmail.com	KAVANA M	21BCA034	1 st Sem
35	2-3-2022 10:51:45	kenzrahman007@gmail.com	KENZ RAHMAN	21BCA035	1 st Sem
36	2-3-2022 10:51:47	krkiran571@gmail.com	KIRAN K R	21BCA036	1 st Sem
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38	2-3-2022 10:51:49	likithbd11@gmail.com	LIKITH ABHINAV N V	21BCA038	1 st Sem
39	2-3-2022 10:52:22	nmmeghana1178@gmail.com	MAHALAKSHMI MEGHANA NEKKANTI	21BCA039	1 st Sem
40	2-3-2022 10:52:26	maniliki007@gmail.com	MANIKANTAN S	21BCA040	1 st Sem
41	2-3-2022 3:53:12	payal.mahesgbhai.mehtu@gmail.c om	MEHTA PAYAL MAHESHBHAI	21BCA041	1 st Sem
42	2-3-2022 10:53:19	reshmakunnath@gmail.com	MITHUN RAJ K V	21BCA042	1 st Sem
43	2-3-2022 10:53:20	mohiitraaaj@gmail.com	MOHIT RAJ	21BCA043	1 st Sem
44	2-3-2022 10:53:59	niranjangowda717@gmail.com	NAVYA A	21BCA044	1 st Sem
45	2-3-2022 10:54:03	nehadkabadi@gmail.com	NEHA D KABADI	21BCA045	1 st Sem
46	2-3-2022 10:54:11	knight25may2002@gmail.com	NISHANT KUMAR	21BCA046	1 st Sem
47	2-3-2022 10:55:11	nived611@gmail.com	NIVED SREEPAL	21BCA047	1 st Sem
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49	2-3-2022 10:57:06	prajwaldd2003@gmail.com	PRAJWAL D D	21BCA049	1 st Sem
50	2-3-2022 10:57:35	prashant.e.kr@gmail.com	PRASHANT KUMAR	21BCA050	1 st Sem
51	2-3-2022 10:58:01	prasurjyasarma9@gmail.com	PRASURJYA SARMA	21BCA051	1 st Sem
52	2-3-2022 10:59:59	priyaranjansree123@gmail.com	PRIYARANJAN S	21BCA052	1 st Sem
53	2-3-2022 11:00:30	pruthvi.g848@gmail.com	PRUTHVI M	21BCA053	1 st Sem
54	2-3-2022 11:02:33	rajdeep.banerjee70@gmail.com	RAJDEEP BANERJEE	21BCA054	1 st Sem
55	2-3-2022 11:03:33	jagruthi rao@yahoo.com	S JAGRUTHI	21BCA055	1 st Sem
56	2-3-2022 11:04:21	samridhisrivastav28@gmail.com	SAMRIDHI SRIVASTAVA	21BCA056	1 st Sem
57	2-3-2022 11:05:59	samskruthikeshavan@gmail.com	SAMSKRUTHI KESHAVAN	21BCA057	1 st Sem
58	2-3-2022 11:07:41	shivarama.official@gmail.com	SHIVA RAMA KRISHNAN P	21BCA058	1 st Sem
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60	2-3-2022 11:08:06		BHARDWAJ	21BCA060	1 st Sem
61	2-3-2022 11:11:27		SHRIJHA J M	21BCA061	1 st Sem
62	2-3-2022 12:09:07		SOORAJ SATHEESH	21BCA062	1 st Sem
63	2-3-2022 12:09:21	lokeshspandhana4@gmail.com	SPANDHANA LOKESH	21BCA063	1 st Sem
64	2-3-2022 12:10:08	sreeraj21sn@gmail.com	SREERAJ S N	21BCA064	1 st Sem
65	2-3-2022 12:10:25	sujayreddy29@gmail.com	SUJAY REDDY C R	21BCA065	1 st Sem
66	2-3-2022 12:10:30	facttechxplore@gmail.com	SUMITH KUMAR R	21BCA066	1 st Sem
67	2-3-2022 12:10:35	kittyraj106@gmail.com	SUNNYKUMAR S	21BCA067	1 st Sem
68	2-3-2022 12:10:42	reddysuryasimha@gmail.com	SURYA SIMHA REDDY Y D	21BCA068	1 st Sem
69	2-3-2022 10:10:49	abu804988@gmail.com	SYED SUFIYAN	21BCA069	1 st Sem
70	2-3-2022 12:11:07	tanigowda04@gmail.com	TANISHQ G	21BCA070	1 st Sem
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72	2-3-2022 11:11:18	thanushreepp@gmail.com	THANUSHREE M P	21BCA072	1 st Sem
73	2-3-2022 12:11:23	inversewarfare@gmail.com	VAIBHAV BANSAL	21BCA073	1 st Sem
74	2-3-2022 12:11:33	varshini1807@gmail.com	VARSHINI N	21BCA074	1 st Sem
75	2-3-2022 12:11:38	varunvarun2081@gmail.com	VARUN M	21BCA075	1 st Sem
76	2-3-2022 12:11:45	vedanshsetia@gmail.com	VEDANSH SETIA	21BCA076	1 st Sem
77	2-3-2022 12:11:51	keerthana8338@gmail.com	Y KEERTHANA	21BCA077	1 st Sem
78	2-3-2022 12:11:56	bharathnani181@gmail.com	YARRA BHARATH KUMAR REDDY	21BCA078	1 st Sem
79	2-3-2022 12:15:45	yashwanth1522003@gmail.com	YASHAVANTH N	21BCA079	1 st Sem
80	2-3-2022 12:25:45	yuvrajnavndra@idoud.com	YUVRAJ NARENDRASWA MY	21BCA080	1 st Sem

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Department of Computer Science

Name of the program: "Internet of Things- IOT"

Year: 2021-22

Duration: 30 hours

Assessment procedure for value added course: Software testing using selenium

Objective: To develop skills required on " Internet of Things- IOT" is an activity which aims at evaluating the quality of a software developers to store the data.

The Department of computer science had organized value added course from 05/01/2022 to 03/02/2022 for BCA students. Total of 80 students had participated in this course.

The certificates were given to all the participants after successfully completion of the course by assessing their knowledge gained during this course. The gained knowledge was assessed with the help of MCQ's

Assessment procedure:

Criteria	Marks
MCQ	20
Attendance	10
Practicals	10
Total	40

Outcome: Understand how to evaluate models generated from data. Apply the algorithms to a real problem.

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Department: Computer Science

Name of the program: "Internet of Things- IOT"

1. What role of the cloud in smart grid architecture is?

Collect data Manage data Security Store data

2. Through which network does Open IoT manage registration, deployment of sensors?

LSM HTTP X-GSN GSN

3. Identify the java extension file in IoT.

.c .py .exe .jar

4. Total types of voice communications in IoT environment is?

1 2 3 4 5. The standard length of the MAC address is 16 bits 48 bits 32 bits 8 bits

6. VNC stands for _____ Virtual network communication Virtual network computing Virtual network computers None

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7. Identify the language preferred for IoT analytics. Python HTML PHP C++

8. Who operates the core element?

PaaS IaaS IoT service provider SaaS

9. Identify the incorrect advantage of IoT.

Reduce waste Enhanced data collection Improve customer engagement Security

10. Who coined the term IoT? IBM Kevin Ashton

Ross Ihaka Guido van Rossum

11. Service is termed as ____, in SOA

Network service Software service **Business** service Developer service

12. Through API, _____ service portability is enabled.

device network services systems

13. Identify the challenge coming under securing the information.

security Power consumption Presence detection signaling 14. Full form of SBC is? Standard business center Smart business center Standard building center Smart building center 15. Total types in which IoT platform is divided.

4 3

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2

16. ITS stands for Internet travel services Intelligent transportation security Intelligent transportation services Internet transport security 17. Which of the following allows to monitor the application boot hypermedia actuators endpoints 18. In which of the following terms in resolution expressed? bits bytes nibble word 19. SLA stands for System local area Service local area System-level argument Service level argument 20. Identify the last step of reliable data transfer. Selective recovery Lost message detection Message relaying Initialization

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Certificate

Department of Computer Science

This is to certify that Mr./Ms... AARON V SULAKHE of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

Xn

HOD (Department of Computer Science)

PRINCIPAL Dr. A. Nagarathna



Certificate

Department of Computer Science

This is to certify that Mr./Ms... ABHIGYAN KUMAR ROY of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

Xn

HOD (Department of Computer Science)

PRINCIPAL Dr. A. Nagarathna



Certificate

Department of Computer Science

This is to certify that Mr./Ms... ABHISHEK M of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

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PRINCIPAL Dr. A. Nagarathna



Certificate

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This is to certify that Mr./Ms... AJAY KRISHNAN H of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

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Certificate

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This is to certify that Mr./Ms... AKSHAY A of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

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Certificate

Department of Computer Science

This is to certify that Mr./Ms... AMRUTHA C V

of I Semester

BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

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This is to certify that Mr./Ms... ANAMIKA MOHAN of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

COORDINATOR (Department of Computer Science)

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This is to certify that Mr./Ms... ANASWARA S

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This is to certify that Mr./Ms... ARAVA LOHITH of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

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This is to certify that Mr./Ms... ATHISH MILLENN PRAKASH

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This is to certify that Mr./Ms... BHAVYA BEDI

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This is to certify that Mr./Ms... BHOOMIKA S PATIL of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

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This is to certify that Mr./Ms... DEEPAK DION P of 1 Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

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This is to certify that Mr./Ms... FERDINAND JOY BIJU of I Semester BCA has successfully completed the course on *Internet of Things (IOT)* organized by Department of Computer Science, MSRCASC in association with MSRIT held between January and February 2022.

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COORDINATOR (Department of Computer Science)

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HOD (Department of Computer Science)

PRINCIPAL Dr. A. Nagarathna