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Date: 12/07/2021

## CIRCULAR

Subject: Academic committee members meeting for analyzing curriculum syllabus of Academic Year 2021-22

This is to inform that there will be a meeting of Academic committee members for analyzing curriculum syllabus of academic year 2021-22. The meeting is scheduled on 14/09/2021 at 10.30 am in HOD's chamber.

SI No.	Faculty Name	Designation	Signature
1	Dr. H. R Ranganatha	HOD	HRRun
2	Dr. Asha P N	Associate Professor	ASI
3	Prof. Prerana Chaithra	Associate Professor	her
4	Prof. Sudarsanan D	Assistant Professor	Pmt
5	Prof. Gayathri R	Assistant Professor	RQ

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14/5, Chikkasendra, Hesaraghatta Main Road Bengaluru - 560 057

on HOD

Dr H.R Ranganatha Prof. & H.O.D Dept.of Information Science & Engg. Sapthagiri College of Engineering # 14/5 Chikkasandra, Hesaraghatta Main Road BENGALURU-560 057



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Date: 14/09/2021

# MINUTES OF MEETING

With reference to circular dated on 14/07/2021, the academic committee member assembled in HODs chamber for addressing the following agenda.

Agenda:

- Reviewing the department curriculum syllabus of Academic Year 2021-22
- Reviewing the feedback analysis of various stake holders of the academic year 2020-21
- Identifying the gaps
- Action to be taken for the identified gaps.

During the meeting the following members were present

Sl No.	Faculty Name	Designation	Signature	
1	Dr. H. R Ranganatha	HOD	ARRAY	
2	Dr. Asha P N	Associate Professor	AST	
3	Prof. Prerana Chaithra	Associate Professor	Ace	
4	Prof. Sudarsanan D	Assistant Professor	pmp	
5	Prof. Gayathri R	Assistant Professor	RQ	

The following points were discussed in the meeting

- 1. The committee members reviewed the department curriculum syllabus of academic year 2021-22.
- 2. The committee members discussed about the feedback of department eurriculum syllabus of academic year 2020-21.
- 3. The members identified the gaps based on the analysis.
- 4. The following actions were taken for the gaps that are identified,



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SL.NO	SEM	Course Title	Identified Gap
1	V-A/B	IOT Blended with Blockchain Technology	Lack of Knowledge in Recent Trends

#### Action Taken:

Based on the feedback obtained from students, faculties and alumni, analysis of syllabus by department academic committee members, it was decided to conduct certification course on "IOT Blended with Blockchain Technology" to overcome the gaps identified in the curriculum/syllabus.

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Date: 14/07/2021

To

IQAC Sapthagiri College of Engineering Bengaluru-560 057

Respected Sir,

Subject: Requisition for conduction of certification program and approval from Governing Council.

With respect to the Academic committee members meeting held for analyzing department curriculum/syllabus for the academic year 2020-21. The committee members identified few gaps after analyzing the syllabus and feedback from the stakeholders. To bridge the gaps identified in the curriculum, the committee members decided to conduct a certification program on "IOT Blended with Blockchain Technology" for the academic year 2021-22. So, I request you to forward and get the approval from the governing council for the same.

Thanking You,

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IQAC - Co-ordinator Sapthagiri College of Engineering Bengaluru - 560 057.



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Date: 16-07-2021

To,

THE PRINCIPAL Sapthagiri College of Engineering Bangalore - 560057.

Respected Sir,

Subject: Budget Proposal for conduction of certification program on "IOT Blended with Blockchain Technology".

The Budget Proposal for conduction a certification program on "IOT Blended with Blockchain Technology" from 23/09/2021 to 29/09/2021 is hereby enclosed for your kind consideration and approval.

The details of the Recurring budget are given as follows:

**Recurring Amount:** 

Sl. No.	Description	Quantity	Amount in Rs.
1	Bouquet	1	200
2	Snacks	Students	1000
3	Renumeration, TA & DA	1	5000
	Total		6200

TROON TCIDA Sapthagirl College of Engineering HOD 14/5, Chikkasandra, Hesaraghatta Main Road Dr H.R Ranganatna Bengaluru - 560 057 Prof. & H.O.D Dept.of Information Science & Engg. Sapthaoiri College of Engineering



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Date: 01/09/2021

#### CIRCULAR

This is to inform that the following Academic Committee members are requested to attend the meeting on 03/09/2021at 10.30AM in the HODs chamber to decide the syllabus and the lesson plan for the certification program on "IOT Blended with Blockchain Technology".

SI No.	Faculty Name	Faculty Name Designation	
1	Dr. H. R Ranganatha	HOD	11 RAM
2	Dr. Asha P N	Associate Professor	ASS
3	Prof. Prerana Chaithra	Associate Professor	lee
4	Prof. Sudarsanan D	Assistant Professor	() mil
5	Prof. Prof. Gayathri R	Assistant Professor	101

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Date:01/09/2021

To,

Prof. Basavaraj Assistant Professor, Department of ISE, Sambhram Institute of technology Bengaluru

Respected Sir,

Subject: Invitation as a "Resource Person" in certification program and to attend meeting to discuss about the certification program

Department of Information Science & Engineering have planned to conduct a certification program titled "**IOT Blended with Blockchain Technology**" for 5<sup>th</sup> semester students from 23-09-2021 to 29-09-2021. In this connection, we are privileged to invite you as a guest speaker on the above mentioned topic.

Thanking you for your kind acceptance to our request on phone. We request you to attend the meeting to discuss about the conduction of certification course on 03/09/2021. We look forward to welcome you at SCE.

Thanking you

Sapthagirl College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Bengaluru - 560 057 Yours faithfully

HOD Dr H.R Ranganama Prof. & H.O.D Dept.of Information Science & Engg. Sapthagiri College of Engineering # 14/5 Chikkasandra, Hesaraghatta Main Road BENGALURU-560 057



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Date: 03/09/2021

# **Minutes of Meeting**

A meeting was conducted on 03/09/2021 in ISE HOD's Chamber to discuss and approve the

following about the 6 days Certification Course for 5<sup>th</sup> semester ISE Students.

- Course Title :"IOT Blended with Blockchain Technology"
- Resource Personnel: Prof.Basavaraj, Asst Professor, Dept of CSE, Sapthagiri College of Engineering, Bengaluru.
- Course Duration & Date: 5 Days from 23-Sept-2021 to 29-Sept-2021

Lesson Plan of the certification program

Dates	SESSION 1 (9.00am-10.30am) Detailed Contents	SESSION 2 (11.00 am-12.30pm) Detailed Contents	SESSION 3 (LAB SESSION) (1.30pm-4.30pm)	Name of Faculty Session Handling	
23-09-2021	<ul> <li>Introduction to the Internet of Things</li> <li>Introduction to Raspberry Pi</li> </ul>	<ul> <li>Introduction to Blockchain</li> <li>Introduction to Hyperledger</li> </ul>	<ul> <li>Hands on - Session</li> <li>Distributed Ledger S1: Technology S2:</li> <li>Scalability in DLT of Blockchain</li> </ul>	Prof.Basavaraju Prof. Priyanka R Prof. Basavaraju	
24-09-2021	<ul> <li>IoT Architecture</li> <li>Recent protocols in IoT (6LoWPAN, RPL, MQTT, Zigbee)</li> </ul>	<ul> <li>Ways to strengthen iot security with blockchain technology</li> <li>Components of Blockchain.</li> </ul>	<ul> <li>Hands on - Session</li> <li>Building the First Network Configuration</li> <li>S3:</li> </ul>	Prof. Gayathri R Prof. Chaithanaya V Prof.Basavaraju	
25-09-2021	<ul> <li>Sending IoT Data to Blockchain</li> <li>Extending the App to send multiple data</li> </ul>	<ul> <li>IOT Paradigms</li> <li>Blockchain v/s Bitcoin</li> </ul>	Build trust in your IoT data Customer centric     S2:     S3:	Prof. Ramya R Prof. Roopa K T	

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Dates	SESSION 1SESSION 2(9.00am-10.30am)(11.00am-12.30pm)Detailed ContentsDetailed Contents		SESSION 3 (LAB SESSION) (1.30pm-4.30pm) Detailed Contents		Name of Faculty Session Handling	
27-09-2021	<ul> <li>Extending the App to send multiple data</li> <li>Real-world solutions</li> </ul>	<ul> <li>Roadmap of Blockchain &amp; IoT         <ul> <li>Industrial IoT requirements</li> </ul> </li> </ul>	<ul> <li>Hands on IOT –Networking Config to Cloud Data and data sets.</li> </ul>	S1: S2: S3:	Dr. Asha P N Prof.Sowmya Somanth	
28-09-2021	<ul> <li>Cloud- centric Internet of Things</li> <li>Data pre- processing and analysis</li> </ul>	<ul> <li>Building the First Network Configuration</li> <li>M2M to IoT</li> </ul>	<ul> <li>Potential IoT applications like Smart health, Smart home, etc.</li> <li>Practical demonstration using Thing speak</li> </ul>	S1: S2: S3:	Prof.Prerana Chaithra Prof. Chaithra B M	
29-09-2021	<ul> <li>Security and privacy issues in IoT</li> <li>Energy harvesting for IoT applications</li> <li>Research challenges in IoT</li> </ul>	• Building First Hyper ledger App and Interactive Session with students	Hands on and Test conduction	S1: S2: S3:	Prof. Sudarsanan D Prof. Divya B S	

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The following members were present in the meeting and the syllabus and lesson plan for the certification program has been decided.

SI No.	Faculty Name	Designation	Signature	
1	Dr. H. R Ranganatha	HOD	HRROW	
2	Dr. Asha P N	Associate Professor	ASZ	
3	Prof. Prerana Chaithra	Associate Professor	fee	
4	Prof. Sudarsanan D	Assistant Professor	12mg	
5	Prof. Gayathri R	Assistant Professor	RE	
6	Prof. Basavaraj	Resource Person	B	

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# NOTICE

As a part of programming skill development Department of Information Science and Engineering is conducting Six days Certification Course on "IOT Blended with Blockchain Technology" from 23-Sept-2021 to 29-Sept-2021

All the 5<sup>th</sup>sem ISE students must attend the course compulsorily.

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#### Student list for Certification Course" IOT Blended with Blockchain Technology"

#### **Branch : ISE**

Semester: 5 A

SI. No.	USN	Name of the Student	Signature
1	1SG19IS001	ADITYA RAJ	Adity Rai
2	1SG19IS002	AKANKSHA KUMARI GUPTA	Akanstide Krimer Chepto
3	1SG19IS003	AMAN BHARDWAJ	Anon Bharten of
4	1SG19IS004	ANANT SHRIPAD HEDGE	Chipe 0
5	1SG19IS005	ANIKET SHUKLA	- Altra
6	1SG19IS006	ANITHA N	Ruitha
7	1SG19IS007	ANJALI	Anjoli
8	1SG19IS008	ANJALI JHA	Andles
9	1SG19IS009	ANKITA N	Ankita
10	1SG19IS010	ANSHUMAN MISHRA	Anchiemen Liehra,
11	1SG19IS011	ANUSHA M	Anuchter
12	1SG19IS012	ANUSHKA PRIYA	Amerille
13	1SG19IS013	APOORVA R	Apoora R
14	1SG19IS014	ASHARANI MG	Allemeni All
15	1SG19IS015	ASHRITHA N	Ashrithan
16	1SG19IS016	ASHWINI M	Ashwini M
17	1SG19IS017	AVINASH KUMAR	Premark
18	1SG19IS018	AYUSH KUMAR DUBEY	Aykuch Kenog Del
19	1SG19IS019	AYUSH SINHA	teach anna
20	1SG19IS020	B S ANIRUDDHA	BS broudelle
21	1SG19IS021	BALAJI U	A
22	1SG19IS022	BHAVANA N	Burever N.
23	1SG19IS024	BRHMADIC KUMAR GAUTAM	Annadik plus luyen
24	1SG19IS025	CHAITRA TP	Chaitres.
25	1SG19IS026	D DHULASI DHEEPTHI	Theepthi
26	1SG19IS028	DEVIKA R	DE
27	1SG19IS029	G HIMABINDHU	Her
28	1SG19IS030	GAGAN BG	Cost - 2
29	1SG19IS031	GAURAV R	Colle Superior 2
30	1SG19IS032	GOKUL DAS K	( Yakel
31	1SG19IS033	GOURAV RAO Y	Cources, Rao. Y
32	1SG19IS034	H M SHREYA	R
33	1SG19IS035	HARSH KUMAR AMBASTA	fullich 15m
34	1SG19IS036	HARSHITH C M	Hanhithen

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36	1SG19IS038	HARSHITHA M	For another the M
37	1SG19IS039	JAHNAVI B N	Jahanarei By
38	1SG19IS040	JANAVI S	Jenou
39	1SG19IS041	JYOTHI G	Fyohie G.
40	1SG19IS042	KAPILA RAJESHWARI S	Kongy
41	1SG19IS043	KARTHIK BHARADWAJ P	P. Kaitflock
42	1SG19IS044	KAVANA SD	Kerring S.P.
43	1SG19IS045	KAVYA B R	gehige Sphan
44	1SG19IS046	KHUSHI SINHA	Korts Kamon
45	1SG19IS047	KIRTI KUMAR	Knishney
46	1SG19IS048	KRISHNA LATH	willy
47	1SG19IS049	KUMAR SHREEYUSH	
48	1SG19IS050	LOHITH B N	Monjet but
49	1SG19IS051	MANJESH KUMAR L D	Montest
50	1SG19IS052	MESHU PRIY	Meshy PVOJ
51	1SG19IS053	MITHUN KUMAR PH	Mithus
52	1SG19IS054	MOHAN N	Mohna
53	1SG19IS055	MONICA D	Marris
54	1SG19IS056	N RACHANA ADIGA	Deruta
55	1SG19IS057	NAKUL VISHNU ACHARI	Que
56	1SG19IS058	NALLAGATLA SATYA VENKATA NARASIMHA	NSuprencel
57	1SG19IS059	NAMRATHA N	Namaresha r.
58	1SG19IS060	NIHARIKA JAGADEESH PATIL	Withouter Dati
59	1SG19IS061	NIKESH KUMAR	NEKCSY
60	1SG19IS062	NISHA A B	Willia
61	1SG19IS063	NITHIN J	hill
62	1SG18IS007	AMAN AKASH	Amen Albert
63	1SG18IS093	SHARAN S	1800
64	1SG17IS054	MOHITH D	hater.D

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36	1SG19IS099	SHUBHAM AGARWAL	Shubber
37	1SG19IS100	SIDDHI YESHWANT SONWALKAR	Side
38	1SG19IS101	SILPA KUMARI	CEL
39	1SG19IS102	SK ZAVED AKHTAR	fue
40	1SG19IS103	SOUJANYA	Soy'any
41	1SG19IS104	SRIHARSHA CP	Sk
42	1SG19IS105	SRIKANT MISHRA	SziThent
43	1SG19IS106	SUJEET KUMAR	soject Kumar
44	1SG19IS107	SURABHI M	Servalit
45	1SG19IS108	SWAROOP CHAND J C	Spreyworkberl J.C
46	1SG19IS109	SWATHI S	"Shathi's
47	1SG19IS110	TANYAPRASAD	Swatis
48	1SG19IS111	TARUN S	ALE_
49	1SG19IS112	TEJAS MC	TOTAS
50	1SG19IS113	ULLAS G	the
51	1SG19IS114	UTKARSH MANDILWAR	ut Kovsy_
52	1SG19IS115	VAISHNAVI M	M Vaichmani
53	1SG19IS116	VIGNESH K	- Vighiebb-
54	1SG19IS117	VIGNESH SHANUBHOG H	Degenerys
55	1SG19IS119	VIKRANT	R
56	1SG19IS120	VISHAL SAI S	Colle
57	1SG19IS121	WAMIQUE HASHMI	- Morniger Heelth
58	1SG19IS122	YASHASWINI K S	Jashaspini K.S.
59	1SG19IS123	YASHASWINI R	Yashanin P.
60	1SG19IS124	YOGEESHWAR P	YSSCESTINGV P.
61	1SG19IS125	ZILLE HUSSAIN	Ville Hurch
62	1SG19IS126	NADEEM PASHA	Abdeempash
63	1SG19IS127	AMAR SINGH	Amor Singh
64	1SG20IS400	NAISARGI DAVE	(PP)
65	1SG20IS401	ANKIT KUMAR DAS	Antonia
66	1SG20IS402	CHANDANA S	Chardans
67	1SG20IS403	SUPRIYA MODAK	suprexe med

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## **Student Attendancefor Certification Course**

## " IOT Blended with Blockchain Technology"

#### Branch : ISE

#### Semester : 5 A

SI. No.	USN	Name of the Student	23/9/21	24/9/21	25/9/21	27/9/21	28/9/21	29/9/21
1.	1SG19IS001	ADITYA RAJ	P	1	P	P	A	P
2	1SG19IS002	AKANKSHA KUMARI GUPTA	P	P	P	P	P	A
3	1SG19IS003	AMAN BHARDWAJ	P	P	P	A	P	P
4	1SG19IS004	ANANT SHRIPAD HEDGE	P	A	P	A	P	P
5	1SG19IS005	ANIKET SHUKLA	P	P	P	P	P	P
6	1SG19IS006	ANITHA N	A	P	P	A	P	P
7	1SG19IS007	ANJALI	D	P	P	A	A	P
8	1SG19IS008	ANJALI JHA	P	P	Þ	A	P	P
9	1SG19IS009	ANKITA N	P	A	P	A	P	A
10	1SG19IS010	ANSHUMAN MISHRA	P	A	P	P	P	P
11	1SG19IS011	ANUSHA M	A	A	P	P	P	P
12	1SG19IS012	ANUSHKA PRIYA	P	P	TS	P	P	P
13	1SG19IS013	APOORVA R	P	8	P	P	P	P
14	1SG19IS014	ASHARANI MG	P	P	P	P	P	P
15	1SG19IS015	ASHRITHA N	P	P	P	P	P	P
16	1SG19IS016	ASHWINI M	A	P	P	P	A	P
17	1SG19IS017	AVINASH KUMAR	A	P	P	P	P	P
18	1SG19IS018	AYUSH KUMAR DUBEY	P	2	P	P	P	B
19	1SG19IS019	AYUSH SINHA	P	A	P	P	P	P
20	1SG19IS020	B S ANIRUDDHA	P	A	P	P	P	P
21	1SG19IS021	BALAJI U	P	P	P	P	P	2
22	1SG19IS022	BHAVANA N	A	P	P	A	P	P
23	1SG19IS024	BRHMADIC KUMAR GAUTAM	P	P	P	P	P	P
24	1SG19IS025	CHAITRA TP	P	P	P	P	P	A
25	1SG19IS026	D DHULASI DHEEPTHI	P	P	A	P	P	P
26	1SG19IS028	DEVIKA R	P	P	P	P	P	P
27	1SG19IS029	G HIMABINDHU	P	P	P	P	P	A
28	1SG19IS030	GAGAN BG	P	P	P	P	P	P
29	1SG19IS031	GAURAV R	P	P	P	P	P	P
30	1SG19IS032	GOKUL DAS K	A	P	P	P	P	A
31	1SG19IS033	GOURAV RAO Y	P	P	P	P	P	P
32	1SG19IS034	H M SHREYA	P	P	P	P-	A	P

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33	1SG19IS035	HARSH KUMAR AMBASTA	P	P	P	P	P	A
34	1SG19IS036	HARSHITH C M	P	A	P	P	P	P
35	1SG19IS037	HARSHITHA H M	P	A	P	P	P	P
36	1SG19IS038	HARSHITHA M	P	A	P	A	P	P
37	1SG19IS039	JAHNAVI B N	P	P	A	A	P	P
38	1SG19IS040	JANAVI S	P	P	A	P	P	P
39	1SG19IS041	JYOTHI G	Å	P	A	P	P	P
40	1SG19IS042	KAPILA RAJESHWARI S	P	P	P	P	P	P
41	1SG19IS043	KARTHIK BHARADWAJ P	P	P	A	P	P	P
42	1SG19IS044	KAVANA SD	12	P	P	P	P	P
43	1SG19IS045	KAVYA B R	A	Þ	P	P	P	P
44	1SG19IS046	KHUSHI SINHA	P	A	P	P	P	P
45	1SG19IS047	KIRTI KUMAR	P	P	P	P	P	P
46	1SG19IS048	KRISHNA LATH	P	R	P	P	P	P
47	1SG19IS049	KUMAR SHREEYUSH	P.	P	P	P	P	P
48	1SG19IS050	LOHITH B N	P	P	P	2	P	P
49	1SG19IS051	MANJESH KUMAR L D	P	P	P	A	P	A
50	1SG19IS052	MESHU PRIY	P	P	D	P	P	A
51	1SG19IS053	MITHUN KUMAR PH	P	P	P	A	P	P
52	1SG19IS054	MOHAN N	Å	P	P	P	Å	P
53	1SG19IS055	MONICA D	P	P	P	P	P	P
54	1SG19IS056	N RACHANA ADIGA	P	P	P	P	2	P
55	1SG19IS057	NAKUL VISHNU ACHARI	A	A	P	P	P	P
56	1SG19IS058	NALLAGATLA SATYA VENKATA NARASIMHA	P	P	P	P	P	P
57	1SG19IS059	NAMRATHA N	FF	P	P	P	P	P
58	1SG19IS060	NIHARIKA JAGADEESH PATIL	D	A	P	P	P	P
59	1SG19IS061	NIKESH KUMAR	P	P	P	P	P	Þ
60	1SG19IS062	NISHA A B	P	P	P	P	P	P
61	1SG19IS063	NITHIN J	P	P	P	P	P	p
62	1SG18IS007	AMAN AKASH	Þ	P	D	P	P	P
63	1SG18IS093	SHARAN S	P	P	P	P	P	P
64	1SG17IS054	MOHITH D	A	P	P	P	P	B

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# SCE C

#### **Student Attendance for Certification Course**

#### " IOT Blended with Blockchain Technology"

#### **Branch : ISE**

#### Semester : 5 B

SI. No.	USN	Name of the Student	23/9/21	24/9/21	25/9/21	27/9/21	28/9/21	29/9/21
1	1SG19IS064	NITHIN S	P	P	P	P	n	P
2	1SG19IS065	NIVEDITHA RAO	P	P	P	P	A	P
3	1SG19IS066	PAVAN GOWDA R	P	P	P	A	P	P
4	1SG19IS067	PRABHAT SHANDILYA	P	A	P	A	P	P
5	1SG19IS068	PRANAM M	P	P	P	A	P	P
6	1SG19IS069	PRANAV N	P	P	P	P	P	P
7	1SG19IS070	PRANAV S HEGDE	P	P	P	P	P	P
8	1SG19IS071	PRASHANT KUMAR	P	P	P	P	P	P
9	1SG19IS072	PRATYAKSHA NARASIMHA AMBIG	P	A	A	P	P	P
10	1SG19IS073	PRINCE MANANI	P	P	2	P	A	P
11	1SG19IS074	PRIYADARSHINI S	P	P	P	A	P	A
12	1SG19IS075	PRIYANKA DN	P	P	P	A	P	P
13	1SG19IS076	PRIYANSH DWIVEDI	P	P	Þ	P	P	P
14	1SG19IS077	PULKIT KUMAR	P	P	D	P	D	P
15	1SG19IS078	R BHARGAVI	P	P	P	P	P	A
16	1SG19IS079	RACHANA S	P	A	P	D	P	P
17	1SG19IS080	RAHUL B	P	A	P	D	2	P
18	1SG19IS081	RAKSHITHA H	P	A	D	Þ	P	P
19	1SG19IS082	RAKSHITHA V	Þ	P	D	P	P	Ď
20	1SG19IS083	ROHAN R VIBHUTI	P	P	P	P	P	P
21	1SG19IS084	ROHIT B N	P	P	P	P	P	P
22	1SG19IS085	ROHIT KUMAR	P	P	P	P	P	P
23	1SG19IS086	ROHITH GANAPATHI BHAT	P	P	P	D	P	P
24	1SG19IS087	S KAUSHAL	P	P	P	P	P	P
25	1SG19IS088	S SELVA MURUGAN	P	2	P	P	P	A
26	1SG19IS089	SAHANA N	P	P	P	P	P	P
27	1SG19IS090	SANJANA SINHA	P	P	P	P	P	P
28	1SG19IS091	SARVAJIT ASHOK BHAT	P	P	P	P	P	P
29	1SG19IS092	SHABNOOR JAHA	P	7	P	Þ	P	P
30	1SG19IS093	SHASHANK K G	P	7	P	P	P	P
31	1SG19IS094	SHIVALI B M	P	P	P	P	P	P

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32	1SG19IS095	SHIVAM KUMAR	P	P	P	P	P	P
33	1SG19IS096	SHREYA RANJAN	P	P	P	A	p	P
34	1SG19IS097	SHREYSHI	P	P	P	P	P	P
35	1SG19IS098	SHRUTI PANDEY	P	P	P	P	P	P
36	1SG19IS099	SHUBHAM AGARWAL	A	A	P	P	P	P
37	1SG19IS100	SIDDHI YESHWANT SONWALKAR	P	P	P	P	P'	P
38	1SG19IS101	SILPA KUMARI	P	D	A	P	P	-P
39	1SG19IS102	SK ZAVED AKHTAR	P	A	A	P	P	P
40	1SG19IS103	SOUJANYA	P	A	P	P	P	P
41	1SG19IS104	SRIHARSHA CP	P	A	P	P	P	P
42	1SG19IS105	SRIKANT MISHRA	P	P	P	P	P	P
43	1SG19IS106	SUJEET KUMAR	P	D	P	P	P	R
44	1SG19IS107	SURABHI M	A	P	P	P	P	P
45	1SG19IS108	SWAROOP CHAND J C	P	P	D	P	A	P
46	1SG19IS109	SWATHI S	P	P	D	2	P	P
47	1SG19IS110	TANYAPRASAD	P	P	P	P	P	P
48	1SG19IS111	TARUN S	A	A	P	P	P	P
49	1SG19IS112	TEJAS MC	P	P	P	P	P	P
50	1SG19IS113	ULLAS G	P	P	P	P	P	P
51	1SG19IS114	UTKARSH MANDILWAR	P	P	A	P	P	P
52	1SG19IS115	VAISHNAVIM	P	P	A	P	P	P
53	1SG19IS116	VIGNESH K	P	P	P	D	A	P
54	1SG19IS117	VIGNESH SHANUBHOG H	P	P	P	P	D	12
55	1SG19IS119	VIKRANT	D	P	Ď	P	P	P
56	1SG19IS120	VISHAL SAI S	P	P	D	A	P	P
57	1SG19IS121	WAMIQUE HASHMI	P	P	P	P	A	P
58	1SG19IS122	YASHASWINI K S	P	P	P	P	A	P
59	1SG19IS123	YASHASWINI R	P	P	P	P	p.	D
60	1SG19IS124	YOGEESHWAR P	P	P	P	P	A	P
61	1SG19IS125	ZILLE HUSSAIN	Ď	P	P	P	P	A
62	1SG19IS126	NADEEM PASHA	P	P	A	P	P	A
63	1SG19IS127	AMAR SINGH	Þ	P	P	PI	A	P
64	1SG20IS400	NAISARGI DAVE	P	P	P	P	D	D
65	1SG20IS401	ANKIT KUMAR DAS	P	P	P	-A	P	A
66	1SG20IS402	CHANDANA S	P	P	P	P	P	P
67	1SG20IS403	SUPRIYA MODAK	P	P	P	P	P	P

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Harr HOD Dr H.R Ranganatha Prof. & H.O.D.

SCE

Dept.of Information Science & Engg. Sapthagiri College of Engineering # 14/5 Chikkasandra, Hesaraghatta Mein Road BENGALURU-560 057



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# NOTICE

Test for Six days Certification Course on "**IOT Blended with Blockchain Technology**" is conducted on 29-Sept-2021 from 3pm to 4 pm. All the 5<sup>th</sup>sem ISE students must attend the test compulsorily.

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HOD Dr H.R Ranganatna Prof. & H.O.D Dept.of Information Science & Engg. Sapthagiri College of Engineering # 14/5 Chikkasandra, Hesaraghatta Mein Road BENGALURU-560 057

#### [Type here]



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#### 8. What does a ledger in blockchain does?

A. Mapping between owner and object B. Identification of objects owned

C. Identification of owners.

9. What is the term for when a blockchain splits?

A.A fork B.A merger C.A division D.None of above

#### 10. A hybrid blockchain has a combination of ...... features.

A. Centralized B. Decentralized C.Both Centralized & Decentralized

D.None of above.

#### 11. Who is a miner in blockchain?

A. Miner is type of blockchain

B. Miner is a person doing calculations to verify a transaction

C. Miners are Computers that validate D. None of the above

#### 12. Which of the following is the way in which an IoT device is associated with data?

A. Internet B. Cloud C. Automata D. Network

13. Which of the following IoT networks has a very short range? A.Short Network B.LPWAN C. SigFox D. Short-range Wireless Network Bangaluru - 560 057 [Type here]



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## DEPARTMENT OF ISE

14. An IoT network is a collection of \_\_\_\_\_ devices.

A.Signal B. Machine to Machine C. Interconnected D. Network to Network

15. What is the main purpose of WoT (Web of Things) in the IoT?

A. Improve the usability & Interoperability B. Reduce the security.

C. Complex the development D. Increase the cost

16. \_\_\_\_\_ allows the user to control electronic components.

A. Android API B. RETful API C. MQTT API D. CoAP API

17. What is another name for I2C?

A. Signal wire interface B. Two wire interfaces C. UART D. USART

18. Which of the following protocols does not exist at the data link layer?

A. ZigBee Smart Energy B. LoRaWAN C. WirelessHART D. Secure MQTT

19. Which of the following languages does GSN work on?

A. Python B. JAVA C. Android D. C++

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<b>20.When</b> A.1998	was	the	actual	term	"Internet	of	Things"	coined?
B.1999 C.2000								
D. 2002								

21.Which	of	the	following	is	not	an	IoT	platform?
A.AmazonWe	ebServices							
B.MicrosoftA	zure							
C.Salesforce								
D.Flipkart								

#### 22. Which of the following option allows us to monitor the application?

A.Boot B. Endpoints C.Actuators D. Hypermedia

23. The core element is operated by .....

A. IaaS B.PaaS C. SaaS D. IoT service Provider

#### 24. What information is conveyed by the SSID that is configured on an IoT device?

- A. the registration server
- B. the wireless network
- C. the home gateway
- D. the default gateway

25. Which command is used to test network connectivity and provide a response to each packet received by the remote host?

- A. ping
- B. tracert
- C. connect
- D. text

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# SCE

# <u>6 days Certification Course on "IOT Blended with Blockchain Technology"</u> <u>Solutions for the Questions</u>

Duration:1hr

Maximum marks :25

#### 1. Which of the following industry can use blockchain technology for cybersecurity?

A.Logistics B. Healthcare C. Critical infrastructure D. All of the Above

ANSWER: All of the Above

#### 2. What are the pillars of blockchain technology?

A.Decentralization B. Immutability C. Transparency D. All the Above

Answer: All the Above.

#### 3.A Blockchain carries no transaction cost.

A. True B. FALSE

ANSWER: True

#### 4. What is the full form of P2P in blockchain?

A.Peer to Peer B. Public to private C. Product to Product D. None of above

Answer.Peer to Peer

5. Blockchain is a type of \_\_\_\_\_

A. View B. Table C. Object D. Database

Answer: Database.

6. Are Decentralized blockchains immutable?

A.True B. False.

Answer: True

7. The blockchain was invented by ..... in 2008.

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A. Alon Musk B. Bill Gates C. Satoshi Nakamoto D. None of above.

#### 8. What does a ledger in blockchain does?

- A. Mapping between owner and object B. Identification of objects owned
- C. Identification of owners.

Answer: Mapping between owner and object

#### 9. What is the term for when a blockchain splits?

A.A fork B.A merger C.A division D.None of above

Answer: Fork.

#### 10. A hybrid blockchain has a combination of ...... features.

A. Centralized B. Decentralized C. Both Centralized & Decentralized

D.None of above.

Answer: Both Centralized & Decentralized

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A. Miner is type of blockchain

B. Miner is a person doing calculations to verify a transaction

C. Miners are Computers that validate D. None of the above

and process blockchain transactions.

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A. Internet B. Cloud C. Automata D. Network

Answer: Cloud

#### 13. Which of the following IoT networks has a very short range?

A.Short Network B.LPWAN C. SigFox D. Short-range Wireless Network

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Answer: Short-range Wireless Network

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Answer: Interconnected.

#### 15. What is the main purpose of WoT (Web of Things) in the IoT?

A. Improve the usability & Interoperability B. Reduce the security.

C. Complex the development D. Increase the cost

Answer: Improve the usability & Interoperability

16. allows the user to control electronic components.

A. Android API B. RETful API C. MQTT API D. CoAP API

Answer: RETful API

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A. Signal wire interface B. Two wire interfaces C. UART D. USART

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A. ZigBee Smart Energy B. LoRaWAN C. WirelessHART D. Secure MQTT

Answer: Secure MQTT

19. Which of the following languages does GSN work on?

A. Python B. JAVA C. Android D. C++

Answer: JAVA

20.When "Internet the was actual term of Things" coined? A.1998 Principa Sapthagirl College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road

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B.1999 C.2000 D. 2002

Answer: 1999

21.Which	of	the	following	is	not	an	IoT	platform?
A.AmazonWe	bServices	;						
B.MicrosoftA	zure							
C.Salesforce								
D.Flipkart								

Answer: Flipkart

#### 22. Which of the following option allows us to monitor the application?

A.Boot B. Endpoints C. Actuators D. Hypermedia

Answer:Boot

#### 23. The core element is operated by .....

A. IaaS B. PaaS C. SaaS D. IoT service Provider

Answer: IoT service Provider

#### 24. What information is conveyed by the SSID that is configured on an IoT device?

- A. the registration server
- B. the wireless network
- C. the home gateway
- D. the default gateway
  - Answer: the wireless network

25. Which command is used to test network connectivity and provide a response to each packet received by the remote host?

- A. ping
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- C. connect
- D. text

Answer:ping

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#### Approved by Academic Committee Members & Resource Person

Sl No.	Faculty Name	Designation	Signature
1	Dr. H. R Ranganatha	HOD	HR Room
2	Dr. Asha P N	Associate Professor	ASL
3	Prof. Prerana Chaithra	Associate Professor	lee
4	Prof. Sudarsanan D	Assistant Professor	Pmp-
5	Prof. Gayathri R	Assistant Professor	RG
6	Prof. Basavaraj	Resource Person	B

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#### 6 days Certification Course on "IOT Blended with Blockchain Technology"

## Participant Feedback

- 1. How was the overall organization of the Certification Course ?
  - a) Poor b) Satisfactory c) Good d) Excellent
- 2. How appropriate were the facilities provided ?
  - a) Poor b) Satisfactory c) Good d) Excellent
- 3. Opportunity to ask questions for clarification and interaction with presenters
  - a) Poor b) Satisfactory c) Good d) Excellent
- 4. Effectiveness of the Hands-on Sessions
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- 5. Topic and contents of the Certification Course
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- 6. How do you rate the Certification Course compared to other workshops that you have attended ?
  - a) Poor b) Satisfactory c) Good d) Excellent
- 7. Generally how was your overall experience during the Certification Course
  - a) Poor b) Satisfactory c) Good d) Excellent
- 8. Any Suggestions:

Student Name:

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**Student Signature:** 



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was very much helpful and great experience Student Name: Nais angi Dave Principal **Student Signature:** Sapthagirl College of Engineering 14/5, Chikkasandra, Hesaraghatta Main Road Beng: luru - 560 057



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More such crunts wird be helpful

in voice **Student Name:** 

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#### 6 days Certification Course on "IOT Blended with Blockchain Technology"

## Participant Feedback

- 1. How was the overall organization of the Certification Course ?
  - a) Poor b) Satisfactory c) Good d) Excellent
- 2. How appropriate were the facilities provided ?
  - a) Poor b) Satisfactory c) Good d) Excellent
- 3. Opportunity to ask questions for clarification and interaction with presenters
  - a) Poor b) Satisfactory c) Good d) Excellent
- 4. Effectiveness of the Hands-on Sessions
  - a) Poor b) Satisfactory c) Good d) Excellent
- 5. Topic and contents of the Certification Course
  - a) Poor b) Satisfactory c) Good d) Excellent
- 6. How do you rate the Certification Course compared to other workshops that you have attended ?
  - a) Poor b) Satisfactory c) Good A) Excellent
- 7. Generally how was your overall experience during the Certification Course
  - a) Poor b) Satisfactory c) Good d) Excellent
- 8. Any Suggestions:

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Student Name:	Kapila	Sapth	agiri College	of Engineer	ent Sig	pto k nature:	aj u huvani s



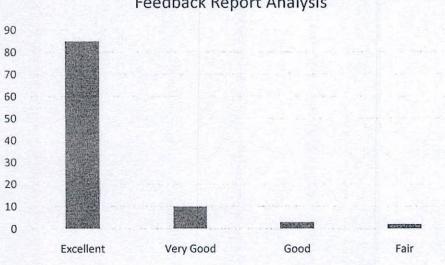
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#### FEEDBACK ANALYSIS

#### Certification Programme: "IOT Blended with Blockchain Technology"

No. of students		Stu	ident Feedback	Contraction of the
participated	Excellent	Very Good	Good	Fair
92	85	10	3	2



#### Feedback Report Analysis

#### Action Report:

85 % of students were completely happy with the certification program and 10 % of students felt it was a good program and remaining 5 % students were satisfied with the program.

#### Action Taken:

The Feedback report which was collected from the students were sent to the principal and he would take necessary actions based on the comments and conduct more programs for the benefit of students.

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ALR ON HOD Dr H.R Ranganatna Prof. & H.O.D Dept.of Information Science & Engg Sapthagiri College of Engineering # 14/5 Chikkasandra, Hesaraghatta Mein Road BENGALURU-560 057



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# **Certification Course Report**

Department of ISE conducted Certification Course on "IOT Blended with Blockchain Technology"GuestSpeaker: Prof. Basavaraj, Assistant professor Department of ISE, Sambhram Institute of technology, Bengaluru.

Duration of the course: Six days from 23-Sept-2021 to 29-Sept-2021

Course detail

**Objective of the Course:** The six days course made the students to be familiar with the major concepts in automation using python which is a main platform for their career .Certification Course became the vital step to improve the knowledge of students

Certification course made them comfortable with the IOT and Blockchain concepts. Learning style adopted by students, which eventually is developed into a skill of their forte. Through this course, an ecstatic learning background paved way to a positive learning environment in the class where active participation was seen from every end. Speaker took the onus of interacting with the students personally to navigate them for the academic transition by becoming the guides by their side.

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#### Schedule of Certification Course

Dates	SESSION 1 (9.00am-10.30am) Detailed Contents	SESSION 2SESSION 3 (LAB(11.00am-SESSION)12.30pm)(1.30pm-4.30pm)Detailed Contents		Name of Faculty Session Handling
23-09-2021	<ul> <li>Introduction to the Internet of Things</li> <li>Introduction to Raspberry Pi</li> </ul>	<ul> <li>Introduction to Blockchain</li> <li>Introduction to Hyperledger</li> </ul>	<ul> <li>Hands on - Session</li> <li>Distributed Ledger S1: Technology S2:</li> <li>Scalability in DLT of Blockchain S3:</li> </ul>	Prof.Basavaraju Prof. Priyanka R Prof. Basavaraju
24-09-2021	<ul> <li>IoT Architecture</li> <li>Recent protocols in IoT (6LoWPAN, RPL, MQTT, Zigbee)</li> </ul>	<ul> <li>Ways to strengthen iot security with blockchain technology</li> <li>Componen ts of Blockchain</li> </ul>	<ul> <li>Hands on - Session</li> <li>Building the First Network Configuration</li> <li>S3:</li> </ul>	Prof. Gayathri R Prof. Chaithanaya V Prof.Basavaraju
25-09-2021	<ul> <li>Sending IoT Data to Blockchain</li> <li>Extending the App to send multiple data</li> </ul>	<ul> <li>IOT Paradigms</li> <li>Blockchain v/s Bitcoin</li> </ul>	Build trust in your IoT data Customer centric     S2/ 3:	Prof. Ramya R Prof. Roopa K T

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### DEPARTMENT OF ISE



Dates	SESSION 1 (9.00am-10.30am) Detailed Contents	SESSION 2 (11.00am-12.30pm) Detailed Contents	SESSION 3 (LAI SESSION) (1.30pm-4.30pm Detailed Content	Name of Faculty Session Handling	
27-09-2021	<ul> <li>Extending the App to send multiple data</li> <li>Real-world solutions</li> </ul>	<ul> <li>Roadmap of Blockchain &amp; IoT</li> <li>Industrial IoT requirements</li> </ul>	<ul> <li>Hands on IOT         <ul> <li>Networking Config to Cloud Data and data sets.</li> </ul> </li> </ul>	S1: S2: S3:	Dr. Asha P N Prof.Sowmya Somanth
28-09-2021	<ul> <li>Cloud- centric Internet of Things</li> <li>Data pre- processing and analysis</li> </ul>	<ul> <li>Building the First Network Configuration</li> <li>M2M to IoT</li> </ul>	<ul> <li>Potential IoT applications like Smart health, Smart home, etc.</li> <li>Practical demonstration using Thing speak</li> </ul>	S1: S2: S3:	Prof.Prerana Chaithra Prof. Chaithra B M
29-09-2021	<ul> <li>Security and privacy issues in IoT</li> <li>Energy harvesting for IoT applications</li> <li>Research challenges in IoT</li> </ul>	• Building First Hyper ledger App and Interactive Session with students		\$1: \$2: \$2/3:	Prof. Sudarsanan D Prof. Divya B S

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**Conclusion:** The optimistic learning environment prompted motivation in the learning of the students. They felt bonhomie after the course they took. A sense of satisfaction was also seen. Faculty members were also equally benefited with the course. A structured environment was created. This helped in the smooth flow of academic lesson plan by adhering to the timelines. This Course helped the student to improve their knowledge in IOT & Blockchain.

#### Glimpse of Certification Course-2021-22



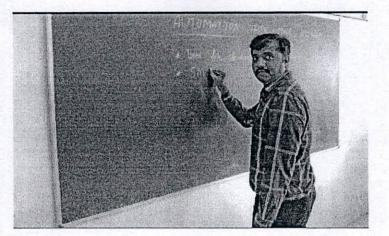
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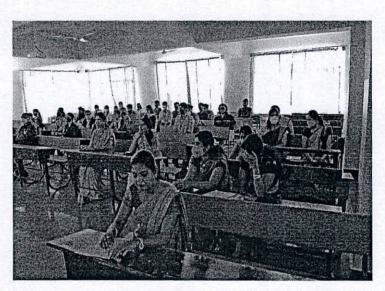


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6 days Certification course on "**IOT Blended with Blockchain Technology**" by Prof. Basavaraj, Assistant professor Department of ISE, Sambhram Institute of technology, Bengaluru from 23-Sept-2021 to 29-Sept-2021.

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# Department of Information Science and Engineering

# **CERTIFICATION COURSE**



# CERTIFICATE OF PARTICIPATION

Mr./Ms. \_\_\_\_\_ has actively Participated in Certification Course

"IOT Blended with block chain Technology" during 23/09/2021 to 29/09/2021

organized by the Department of Information Science.

Principal

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Dr. H. Ramakrishna Principal

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# **CERTIFICATION COURSE**



# CERTIFICATE OF PARTICIPATION

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Dr. H.R. Ranganatha HOD & Convener, ISE Dept.

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# CERTIFICATE OF PARTICIPATION

Mr./Ms. <u>GAGAN B.G.</u>has actively Participated in Certification Course "IOT Blended with block chain Technology" during 23/09/2021 to 29/09/2021

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