



ACE College of Engineering

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Thiruvallam P.O. Thiruvananthapuram-695027 Kerala India
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Add On/ Certificate Programs Academic Year 2021-22




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ACE College of Engineering
Thiruvallam P.O.
Thiruvananthapuram-695 027



Add-on course Academic Year 2021-22

Sl. No	Course Code	Name of Add on/Certificate Program offered	Year of offering	Branch	Number of students completed the course in the year	Type of Add on course
1	AO21001	Workshop on UAV	II	Aeronautical	40	Self- Framed Course
2	AO21002	Aeromodelling and Water Rocketry	I	Aeronautical	33	Self- Framed Course
3	ECE21003	Python Programming	II	Electronics & Communication	30	Self- Framed Course
4	ECE21001	IOT using Arduino	III	Electronics & Communication	25	Self- Framed Course
5	ECE21002	Data Science	IV	Electronics & Communication	32	Self- Framed Course
6	ME21002	Business Intelligence	II	Mechanical	30	Self- Framed Course
7	ME21001	Vehicle Overhauling	IV	Mechanical	31	Self- Framed Course
8	EEE21001	Introduction to Arduino	III	Electrical & Electronics	21	Self- Framed Course
9	ECE21002	Accident Prevention and Risk Management in Electrical System	I	Electrical & Electronics	16	Self- Framed Course
10	CE21001	Revit architecture	III	Civil	33	Self- Framed Course
11	CE21002	AutoCad 3D	II	Civil	36	Self- Framed Course



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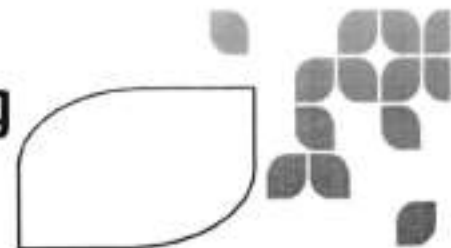
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Thiruvananthapuram-686 027



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From

The Head of the Department,
Department of Aeronautical Engineering,
ACE College of Engineering, Trivandrum

To

The Principal
ACE College of Engineering,
Trivandrum

Respected Sir,

Sub: Permission for conducting an Add-On Course- 'Workshop on UAV'

The department of Aeronautical Engineering has planned to conduct a Five day Add-on programme named 'Workshop on UAV' for Second Year students of our department, from 04/10/21 to 08/10/21. **Mr. Prem Kishore**, Assistant Professor of Department of Aeronautical Engineering of our college is the resource person for this 35 hour programme. We will be providing certificates to those who complete the programme. The detailed course content and schedule is attached herewith for your kind approval.

Thanking You

Truly

ACE TVM,

23/09/2021

Yours




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DEPARTMENT OF AERONAUTICAL ENGINEERING

Circular

Date: 27/09/2021

We are extremely happy to inform you that the Department of Aeronautical Engineering will be conducting a 5 day course named 'Workshop on UAV' for Second Year Aeronautical Students at ACE College of Engineering from, 04/10/2021 to 08/10/2021. This is an Add-On course, off from your curriculum and certificates will be issued to those who complete. Rest of the details of the programme and the schedule is put on the notice board, for you reference. All Students are requested to register & attend the programme. Fullest cooperation is solicited for the successful conduct of the training.

Note: To be read on Second year Aeronautical Engineering class.

Coordinator

HOD



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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Course Content

Course Description: - The course is intended to add up to curriculum to introduce into the field of Unmanned Aerial Vehicle for those who pursue Aeronautical Engineering. The course will give touch up introductory training on UAV construction. The course is designed to have three phases during the programme. In the first phase we introduce to field of UAVs and give future perspective of this field. In the second phase the course will go into detailed details of two types of UAV, the students are made to form groups and then work as team in construction of two types of UAVs, Quadcopter and fixed wing type UAV. After the construction there will flying sessions which will seal off the objective this course impinging interest in this field to their minds. In last phase we make students come up with new ideas and assess the attainment of the course objective. The details of each day, different sessions is as follows.

Day	Phase	Session	Topic	Hours	Type
1	I	Session-1	Introduction to UAV - What is an UAV? - Purpose of UAV - Classification of UAV - Applications - Discussion on few samples	1	PPT & Videos
		Session-2	Evolution of UAV - Early UAVs - Modern UAVs - Evolution of propulsion systems - Evolutions of control systems - Evolution of communication systems	2	PPT & Videos

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Principal
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Day	Phase	Session	Topic	Hours	Type
1	I	Session-3	UAV of Historical Importance Description of Five UAVs, discussion their aerodynamics characteristics, range, endurance, stealth characteristics, missions undergone, load carrying capacities.	1.5	PPT & Videos
		Session-4	Queries Student can clarify their ideas and one to one interaction is provided.	1	
2	II	Session-1	Introduction to Quadcopter • Purpose • Parts • Applications • Recent trends and developments	1	PPT
		Session-2	Key components and their functions. • Frame & Legs • ESC • Flight Controller Board • BLDC motor • Receiver • Transmitter • Li-po Battery	3.5	PPT
		Session-3	Identification of components The different components Frame & Legs, ESC, Flight Controller Board, BLDC motor, Receiver, Transmitter, Li-po Battery, etc. are shared with students to have look on and identify.	1	Hands-on
3	II	Session-1	Construction & Assembly of Quadcopter The students are made to form groups having maximum of 7 students in each group. The required raw materials are given to students and are guided to assemble to form a fully functional Quadcopter.	3	Hands-on
		Session-2	Flying Each Quadcopter is checked prior to flying and instruction are given regarding the safe operation and allowed to fly in restricted environment.	2.5	Hands-on


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4	II	Session-1	Fixed wing UAV construction using Foam sheet The students are made to form groups having maximum of 7 students in each group. The required raw materials are given to students and are guided to assemble to form a fully functional fixed wing UAV.	3	Hands-on
		Session-2	Flying Each Quadcopter is checked prior to flying and instruction are given regarding the safe operation and allowed to fly in restricted environment.	2.5	Hands-on
5	III	Session-1	Innovations The students are made to form groups having maximum of 7 students in each group. They are given assignment to bring up with an innovation they could make in the field of UAV. Each group after discussion with group members should come up with one is mandatory.	1	Interactive
		Session-2	Presentation of innovations Each group is allowed to present their innovation by any means of presentation.	2	Interactive
		Session-3	Assessment The students are given assessment question having 15 question, each carrying 1 mark each. Student scoring min 10 marks will be declared to have passed and will be given certificate.	1.5	Interactive
		Session-4	Feedback The students are given feedback sheets for the assessment of programme and also interactive session will be provided to comment on conduction of programme. End of Programme Certificates will be Issued.	1	Interactive

Course Outcome: The students will understand the basic working of UAV. They will be able to construct a Quadcopter and fixed wing type UAV on their own.

Coordinator



Principal
ACE College of Engineering
Thiruvananthapuram
Phone: 94470 02702
Thiruvananthapuram - 695 027

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001- WORKSHOP ON UAV
Academic Year: 2021-22

Resource Person Profile



Resource Person Name	: Mr. Prem Kishore
Designation	: Assistant Professor, Department of Aeronautical Engineering
Specialization	: M.Tech Aeronautical Engineering
Areas of Interest	: UAV, Quadcopter, Mechanism of machines
Teaching Experience	: 8 years
Email ID	: prem.kishore@acetvm.com

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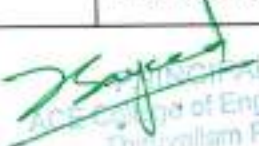
DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Time Table

Sl No	Date	9.00 am-10.00 am		10.15 am-12.15 pm		1.30pm-3.00 pm		3.10 pm-4.10 pm
1	04/10/21	Session-1 Introduction to UAV	Break 15 min	Session -2 Evolution of UAV	Lunch Break 12.35pm -1.25pm	Session -3 UAV of Historical Importance	Break 10 min	Session -4 Queries
2	05/10/21	Session-1 Introduction to Quadcopter		Session-2 Key components and their functions.		Session-2 Key components and their functions.		Session-3 Identification of components
3	06/10/21	Session -1 Construction & Assembly of Quadcopter		Session -1 Construction & Assembly of Quadcopter.		Session -2 Flying		Session -2 Flying
4	07/10/21	Session-1 Fixed wing UAV construction using Foam sheet		Session-1 Fixed wing UAV construction using Foam sheet		Session -2 Flying		Session -2 Flying
5	08/10/21	Session-1 Innovations		Session-2 Presentation of innovations		Session -3 Assessment		Session -4 Feedback


Coordinator


Department of Engineering
Thiruvallam P.O
Thiruvananthapuram-695 027


HOD

Workshop on UAV

Department of
Aeronautical Engineering

Duration: 04/10/2021 - 08/10/2021

Resource Person
Mr. Prem Kishore

Convener (HOD)
Mr. Sabu S. Joseph

Coordinator
(Assistant Professor)
Mr. Al Ameen H.

Patron
Dr. Farrukh Sayeed
Principal



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Add-On Course AO21001-WORKSHOP ON UAV

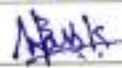
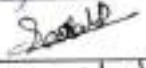
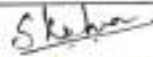
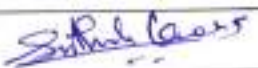
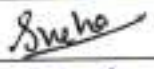
Academic Year: 2021-22

Students Enrolled List

Sl. No.	Register Number	Name	Signature
1.	ACE20AO002	AISHWARYA LEKSHMI S A	
2.	ACE20AO003	AISWARYA B M	
3.	ACE20AO004	AJIMI S	
4.	ACE20AO005	AKASH A S	
5.	ACE20AO006	AKASH S KUMAR	
6.	ACE20AO007	AKHILESH A J	
7.	ACE20AO008	ALIF MOHAMMED S	
8.	ACE20AO009	AMAL RAJ A	
9.	ACE20AO010	AMBROSE ANTONY	
10.	ACE20AO011	ANAMIKA S JITH	
11.	ACE20AO012	ANFAL AHAMMAD N	
12.	ACE20AO013	ANNA ALINA ROBERT	
13.	ACE20AO014	ANUPAMA SATHEESH	
14.	ACE20AO015	ASHIK HUSSIAN N	
15.	ACE20AO016	ASHISH P J	
16.	ACE20AO017	ASHISH SENGER	
17.	ACE20AO018	ATHIRA L	
18.	ACE20AO019	BHAVYA B A	
19.	ACE20AO020	GOPIKA S	
20.	ACE20AO021	HAYAGRIVAPOORNA B L	
21.	ACE20AO022	KAVYA B	

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22.	ACE20AO023	K B ANASS	
23.	ACE20AO024	KESANAPALLI NITHIN	
24.	ACE20AO025	MIDHUN KANNAN T M	
25.	ACE20AO026	MOHAMED AMEEN	
26.	ACE20AO027	NAYANA PRAKASH	
27.	ACE20AO028	NIHAL N	
28.	ACE20AO029	P C FENEETA	
29.	ACE20AO030	SARATH S D	
30.	ACE20AO031	SARATH S KRISHNA	
31.	ACE20AO032	SATHEESHKUMAR S	
32.	ACE20AO033	S D VISHAL	
33.	ACE20AO034	SHINOY SHAJI	
34.	ACE20AO035	SNEHA ALOSIOUS	
35.	ACE20AO036	SOUMYA S	
36.	ACE20AO037	SRUTHI SATHEESH	
37.	ACE20AO038	SUBRAMANYAN S	
38.	ACE20AO039	SURAJ SUDHEENDRAN	
39.	ACE20AO040	VARSHA MOHAN G	
40.	ACE20AO041	VIGNESH V R	



Course coordinator



HOD



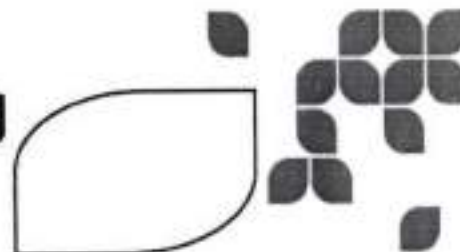

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Attendance Sheet

Sl. No.	Name	04/10/2021	05/10/2021	06/10/2021	07/10/2021	08/10/2021
1.	AISHWARYA LEKSHMI S A					
2.	AISWARYA B M					
3.	AJIMI S					
4.	AKASH A S					
5.	AKASH S KUMAR					
6.	AKHILESH A J					
7.	ALIF MOHAMMED S					
8.	AMAL RAJ A					
9.	AMBROSE ANTONY					
10.	ANAMIKA S JITH					
11.	ANFAL AHAMMAD N					
12.	ANNA ALINA ROBERT					
13.	ANUPAMA SATHEESH					
14.	ASHIK HUSSIAN N					
15.	ASHISH P J					
16.	ASHISH SENER					

17.	ATHIRA L	<u>Athira</u>	<u>Athira</u>	<u>Athira</u>	<u>Athira</u>	<u>Athira</u>
18.	BHAVYA B A	<u>Bhav</u>	<u>Bhav</u>	<u>Bhav</u>	<u>Bhav</u>	<u>Bhav</u>
19.	GOPIKA S	<u>Gopi</u>	<u>Gopi</u>	<u>Gopi</u>	<u>Gopi</u>	<u>Gopi</u>
20.	HAYAGRIVAPOORNA B L	<u>Hayagr</u>	<u>Hayagr</u>	<u>Hayagr</u>	<u>Hayagr</u>	<u>Hayagr</u>
21.	KAVYA B	<u>Kavya</u>	<u>Kavya</u>	<u>Kavya</u>	<u>Kavya</u>	<u>Kavya</u>
22.	K B ANASS	<u>Kb</u>	<u>Kb</u>	<u>Kb</u>	<u>Kb</u>	<u>Kb</u>
23.	KESANAPALLI NITHIN	<u>Kes</u>	<u>Kes</u>	<u>Kes</u>	<u>Kes</u>	<u>Kes</u>
24.	MIDHUN KANNAN T M	<u>Midhun</u>	<u>Midhun</u>	<u>Midhun</u>	<u>Midhun</u>	<u>Midhun</u>
25.	MOHAMED AMEEN	<u>Mohamed</u>	<u>Mohamed</u>	<u>Mohamed</u>	<u>Mohamed</u>	<u>Mohamed</u>
26.	NAYANA PRAKASH	<u>Nayana</u>	<u>Nayana</u>	<u>Nayana</u>	<u>Nayana</u>	<u>Nayana</u>
27.	NIHAL N	<u>Nihal</u>	<u>Nihal</u>	<u>Nihal</u>	<u>Nihal</u>	<u>Nihal</u>
28.	P C FENEETA	<u>Pc</u>	<u>Pc</u>	<u>Pc</u>	<u>Pc</u>	<u>Pc</u>
29.	SARATH S D	<u>Sarath</u>	<u>Sarath</u>	<u>Sarath</u>	<u>Sarath</u>	<u>Sarath</u>
30.	SARATH S KRISHNA	<u>Sarath</u>	<u>Sarath</u>	<u>Sarath</u>	<u>Sarath</u>	<u>Sarath</u>
31.	SATHEESHKUMAR S	<u>Satheesh</u>	<u>Satheesh</u>	<u>Satheesh</u>	<u>Satheesh</u>	<u>Satheesh</u>
32.	S D VISHAL	<u>Sd</u>	<u>Sd</u>	<u>Sd</u>	<u>Sd</u>	<u>Sd</u>
33.	SHINOY SHAJI	<u>Shino</u>	<u>Shino</u>	<u>Shino</u>	<u>Shino</u>	<u>Shino</u>
34.	SNEHA ALOSIOUS	<u>Sneha</u>	<u>Sneha</u>	<u>Sneha</u>	<u>Sneha</u>	<u>Sneha</u>
35.	SOUMYA S	<u>Soumya</u>	<u>Soumya</u>	<u>Soumya</u>	<u>Soumya</u>	<u>Soumya</u>
36.	SRUTHI SATHEESH	<u>Sruthi</u>	<u>Sruthi</u>	<u>Sruthi</u>	<u>Sruthi</u>	<u>Sruthi</u>
37.	SUBRAMANYAN S	<u>Subram</u>	<u>Subram</u>	<u>Subram</u>	<u>Subram</u>	<u>Subram</u>
38.	SURAJ SUDHEENDRAN	<u>Suraj</u>	<u>Suraj</u>	<u>Suraj</u>	<u>Suraj</u>	<u>Suraj</u>
39.	VARSHA MOHAN G	<u>Varsha</u>	<u>Varsha</u>	<u>Varsha</u>	<u>Varsha</u>	<u>Varsha</u>
40.	VIGNESH V R	<u>Vignesh</u>	<u>Vignesh</u>	<u>Vignesh</u>	<u>Vignesh</u>	<u>Vignesh</u>

Athira
Course coordinator

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Course Completed Students List

Sl. No.	Register Number	Name	Course Completed
1.	ACE20AO002	AISHWARYA LEKSHMI S A	✓
2.	ACE20AO003	AISWARYA B M	✓
3.	ACE20AO004	AJIMI S	✓
4.	ACE20AO005	AKASH A S	✓
5.	ACE20AO006	AKASH S KUMAR	✓
6.	ACE20AO007	AKHILESH A J	✓
7.	ACE20AO008	ALIF MOHAMMED S	✓
8.	ACE20AO009	AMAL RAJ A	✓
9.	ACE20AO010	AMBROSE ANTONY	✓
10.	ACE20AO011	ANAMIKA S JITH	✓
11.	ACE20AO012	ANFAL AHAMMAD N	✓
12.	ACE20AO013	ANNA ALINA ROBERT	✓
13.	ACE20AO014	ANUPAMA SATHEESH	✓
14.	ACE20AO015	ASHIK HUSSIAN N	✓
15.	ACE20AO016	ASHISH P J	✓
16.	ACE20AO017	ASHISH SENGER	✓
17.	ACE20AO018	ATHIRA L	✓
18.	ACE20AO019	BHAVYA B A	✓
19.	ACE20AO020	GOPIKA S	✓
20.	ACE20AO021	HAYAGRIVAPOORNA B L	✓
21.	ACE20AO022	KAVYA B	✓
22.	ACE20AO023	K B ANASS	✓
23.	ACE20AO024	KESANAPALLI NITHIN	✓
24.	ACE20AO025	MIDHUN KANNAN T M	✓
25.	ACE20AO026	MOHAMED AMEEN	✓
26.	ACE20AO027	NAYANA PRAKASH	✓
27.	ACE20AO028	NIHAAN	✓

28.	ACE20AO029	P C FENEETA	✓
29.	ACE20AO030	SARATH S D	✓
30.	ACE20AO031	SARATH S KRISHNA	✓
31.	ACE20AO032	SATHEESHKUMAR S	✓
32.	ACE20AO033	S D VISHAL	✓
33.	ACE20AO034	SHINOY SHAJI	✓
34.	ACE20AO035	SNEHA ALOSIOUS	✓
35.	ACE20AO036	SOUMYA S	✓
36.	ACE20AO037	SRUTHI SATHEESH	✓
37.	ACE20AO038	SUBRAMANYAN S	✓
38.	ACE20AO039	SURAJ SUDHEENDRAN	✓
39.	ACE20AO040	VARSHA MOHAN G	✓
40.	ACE20AO041	VIGNESH V R	✓

Course coordinator

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student:..... Semester:.....

Date:.....

Questions

- Which of the following comes under UAV?
A. Lockheed SR-71 B. Mikoyan MiG-29 C. RQ-4 Global Hawk D. Chengdu J-20 **ANS:**
- What is ESC?
A. Electronic Speed Controller B. Electric Speed Controller C. Electric Synchronous Controller D. Electronic Synchronous Controller **ANS:**
- Weight of Nano UAV is up to.
A. Up to 500g B. Up to 2500g C. Up to 250g D. Up to 5000g **ANS:**
- Which is the brain of UAV?
A. ESC B. Motor/Engine C. Gyroscope D. Flight Control Board **ANS:**
- What is the function of accelerometer in UAV?
A. Measures the rate of rotation. B. Measures the rate of acceleration. C. Measures the rate of deceleration. D. Measures the angular velocity. **ANS:**
- Number of ESC required for Quadcopter is
A. 1 B. 2 C. 3 D. 4 **ANS:**
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 **ANS:**

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8. Number of Channels required for controlling a Quadcopter is
 A. 1 B. 3 C. 4 D. 5 ANS:
9. Number of Channels required for controlling a Fixed wing UAV is
 A. 5 B. 6 C. 4 D. 3 ANS:
10. Function of Transmitter is
 A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS:
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
 A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS:
12. The type of battery mostly used in small Quadcopter is
 A. Alkaline Battery B. Lithium – Ion Battery C. Nickel – Metal Hydride D. Nickel – Cadmium Batteries ANS:
13. The type of motor used for actuating mechanism in fixed wing UAVs is
 A. Servo motor B. Series motor C. Shunt motor D. Stepper motor ANS:
14. The type of motor used in Quadcopter for its flight is
 A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS:
15. The function of receiver is
 A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS:

Name of Evaluator:

Designation:



Score secured: /15

Signature:

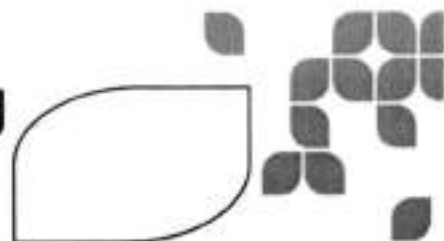
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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Marks

Sl. No.	Register Number	Name	Max. Marks (15)
1.	ACE20AO002	AISHWARYA LEKSHMI S A	14
2.	ACE20AO003	AISWARYA B M	15
3.	ACE20AO004	AJIMI S	15
4.	ACE20AO005	AKASH A S	14
5.	ACE20AO006	AKASH S KUMAR	14
6.	ACE20AO007	AKHILESH A J	15
7.	ACE20AO008	ALIF MOHAMMED S	15
8.	ACE20AO009	AMAL RAJ A	15
9.	ACE20AO010	AMBROSE ANTONY	15
10.	ACE20AO011	ANAMIKA S JITH	15
11.	ACE20AO012	ANFAL AHAMMAD N	15
12.	ACE20AO013	ANNA ALINA ROBERT	15
13.	ACE20AO014	ANUPAMA SATHEESH	14
14.	ACE20AO015	ASHIK HUSSIAN N	14
15.	ACE20AO016	ASHISH P J	15
16.	ACE20AO017	ASHISH SENGER	15
17.	ACE20AO018	ATHIRA L	14
18.	ACE20AO019	BHAVYA B A	15
19.	ACE20AO020	GOPIKA S	15
20.	ACE20AO021	HAYAGRIVAPOORNA B L	15
21.	ACE20AO022	KAVYA B	15
22.	ACE20AO023	K B ANASS	15
23.	ACE20AO024	KESANAPALLI NITHIN	15
24.	ACE20AO025	MIDHUN KANNAN T M	15
25.	ACE20AO026	MOHAMED AMEEN	14
26.	ACE20AO027	NAYANA PRAKASH	15
27.	ACE20AO028	NIHAL N	15
28.	ACE20AO029	P C FENEETA	13
29.	ACE20AO030	SARATH S D	15
30.	ACE20AO031	SARATH S KRISHNA	15

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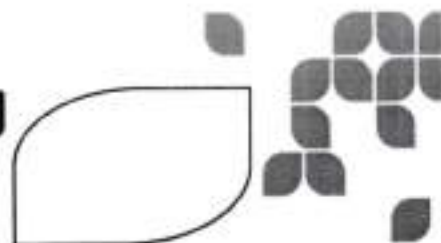




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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV Academic Year: 2021-22

31.	ACE20AO032	SATHEESHKUMAR S	14
32.	ACE20AO033	S D VISHAL	14
33.	ACE20AO034	SHINOY SHAJI	15
34.	ACE20AO035	SNEHA ALOSIOUS	15
35.	ACE20AO036	SOUMYA S	13
36.	ACE20AO037	SRUTHI SATHEESH	15
37.	ACE20AO038	SUBRAMANYAN S	15
38.	ACE20AO039	SURAJ SUDHEENDRAN	14
39.	ACE20AO040	VARSHA MOHAN G	15
40.	ACE20AO041	VIGNESH V R	12

Coordinator

HOD

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: ABHINAV B.M Semester: 03

Date: 08/10/21

Questions

- Which of the following comes under UAV?
A. Lockheed SR-71 B. Mikoyan MiG-29 C. RQ-4 Global Hawk D. Chengdu J-20 ANS: C
- What is ESC?
A. Electronic Speed Controller B. Electric Speed Controller C. Electric Synchronous Controller D. Electronic Synchronous Controller ANS: A
- Weight of Nano UAV is up to.
A. Up to 500g B. Up to 2500g C. Up to 250g D. Up to 5000g ANS: A
- Which is the brain of UAV?
A. ESC B. Motor/Engine C. Gyroscope D. Flight Control Board ANS: A
- What is the function of accelerometer in UAV?
A. Measures the rate of rotation. B. Measures the rate of acceleration. C. Measures the rate of deceleration. D. Measures the angular velocity. ANS: A
- Number of ESC required for Quadcopter is
A. 1 B. 2 C. 3 D. 4 ANS: B
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 5 ANS: A

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8. Number of Channels required for controlling a Quadcopter is
A. 1 B. 3 C. 4 D. 5 ANS: C
9. Number of Channels required for controlling a Fixed wing UAV is
A. 5 B. 6 C. 4 D. 3 ANS: D
10. Function of Transmitter is
A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: B
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B
12. The type of battery mostly used in small Quadcopter is
A. Alkaline Battery B. Lithium – Ion Battery C. Nickel – Metal Hydride D. Nickel – Cadmium Batteries ANS: B
13. The type of motor used for actuating mechanism in fixed wing UAVs is
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor ANS: A
14. The type of motor used in Quadcopter for its flight is
A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C
15. The function of receiver is
A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

Score secured: 13 / 15

Name of Evaluator: NEWSON

Designation: A.P

Signature:



2

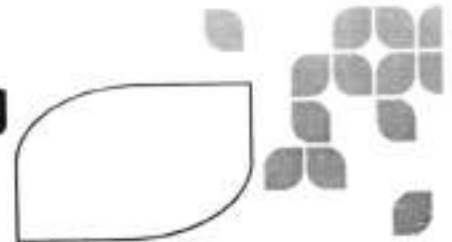
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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: FENEETA Semester: 3

Date: 01/10/21

Questions

- Which of the following comes under UAV?
A. Lockheed SR-71 B. Mikoyan MiG-29 C. RQ-4 Global Hawk D. Chengdu J-20 **ANS: C**
- What is ESC?
A. Electronic Speed Controller B. Electric Speed Controller C. Electric Synchronous Controller D. Electronic Synchronous Controller **ANS: A**
- Weight of Nano UAV is up to.
A. Up to 500g B. Up to 2500g C. Up to 250g D. Up to 5000g **ANS: A**
- Which is the brain of UAV?
A. ESC B. Motor/Engine C. Gyroscope D. Flight Control Board **ANS: D**
- What is the function of accelerometer in UAV?
A. Measures the rate of rotation. B. Measures the rate of acceleration. C. Measures the rate of deceleration. D. Measures the angular velocity. **ANS: B**
- Number of ESC required for Quadcopter is
A. 1 B. 2 C. 3 D. 4 **ANS: D**
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 **ANS: C**



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8. Number of Channels required for controlling a Quadcopter is
A. 1 B. 3 C. 4 D. 5 ANS: C
9. Number of Channels required for controlling a Fixed wing UAV is
A. 5 B. 6 C. 4 D. 3 ANS: D
10. Function of Transmitter is
A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: D
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B
12. The type of battery mostly used in small Quadcopter is
A. Alkaline Battery B. Lithium – Ion Battery C. Nickel – Metal Hydride D. Nickel – Cadmium Batteries ANS: B
13. The type of motor used for actuating mechanism in fixed wing UAVs is
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor ANS: A
14. The type of motor used in Quadcopter for its flight is
A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C
15. The function of receiver is
A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

[illegible]

Score secured: 15 /15

Name of Evaluator: NEWTON

Designation: A.P

Signature:



2

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: Aakash Sengupta Semester: 3

Date: 8/10/21

Questions

1. Which of the following comes under UAV?
A. Lockheed SR-71 B. Mikoyan MiG-29 C. RQ-4 Global Hawk D. Chengdu J-20 ANS: C
2. What is ESC?
A. Electronic Speed Controller B. Electric Speed Controller C. Electric Synchronous Controller D. Electronic Synchronous Controller ANS: A
3. Weight of Nano UAV is up to.
A. Up to 500g B. Up to 2500g C. Up to 250g D. Up to 5000g ANS: A
4. Which is the brain of UAV?
A. ESC B. Motor/Engine C. Gyroscope D. Flight Control Board ANS: D
5. What is the function of accelerometer in UAV?
A. Measures the rate of rotation. B. Measures the rate of acceleration. C. Measures the rate of deceleration. D. Measures the angular velocity. ANS: A
6. Number of ESC required for Quadcopter is
A. 1 B. 2 C. 3 D. 4 ANS: D
7. The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 ANS: A

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: MOHAMMED AMEEN Semester: 3

Date: 08/10/21

Questions

- Which of the following comes under UAV?
A. Lockheed SR-71 B. Mikoyan MiG-29 C. RQ-4 Global Hawk D. Chengdu J-20 **ANS: C**
- What is ESC?
A. Electronic Speed Controller B. Electric Speed Controller C. Electric Synchronous Controller D. Electronic Synchronous Controller **ANS: A**
- Weight of Nano UAV is up to.
A. Up to 500g B. Up to 2500g C. Up to 250g D. Up to 5000g **ANS: A**
- Which is the brain of UAV?
A. ESC B. Motor/Engine C. Gyroscope D. Flight Control Board **ANS: C**
- What is the function of accelerometer in UAV?
A. Measures the rate of rotation. B. Measures the rate of acceleration. C. Measures the rate of deceleration. D. Measures the angular velocity. **ANS: B**
- Number of ESC required for Quadcopter is
A. 1 B. 2 C. 3 D. 4 **ANS: D**
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 **ANS: A**

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8. Number of Channels required for controlling a Quadcopter is
A. 1 B. 3 C. 4 D. 5 ANS: C
9. Number of Channels required for controlling a Fixed wing UAV is
A. 5 B. 6 C. 4 D. 3 ANS: D
10. Function of Transmitter is
A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: D
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B
12. The type of battery mostly used in small Quadcopter is
A. Alkaline Battery B. Lithium – Ion Battery C. Nickel – Metal Hydride D. Nickel – Cadmium Batteries ANS: B
13. The type of motor used for actuating mechanism in fixed wing UAVs is
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor ANS: A
14. The type of motor used in Quadcopter for its flight is
A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C
15. The function of receiver is
A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

Score secured: 14 / 15

Name of Evaluator: NEWTON

Designation: A - P

Signature: _____



2



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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: VARSHA Semester: THREE

Date: 08/10/21

Questions

- Which of the following comes under UAV?
A. Lockheed SR-71 B. Mikoyan MiG-29 C. RQ-4 Global Hawk D. Chengdu J-20 **ANS: C**
- What is ESC?
A. Electronic Speed Controller B. Electric Speed Controller C. Electric Synchronous Controller D. Electronic Synchronous Controller **ANS: A**
- Weight of Nano UAV is up to.
A. Up to 500g B. Up to 2500g C. Up to 250g D. Up to 5000g **ANS: A**
- Which is the brain of UAV?
A. ESC B. Motor/Engine C. Gyroscope D. Flight Control Board **ANS: A**
- What is the function of accelerometer in UAV?
A. Measures the rate of rotation. B. Measures the rate of acceleration. C. Measures the rate of deceleration. D. Measures the angular velocity. **ANS: B**
- Number of ESC required for Quadcopter is
A. 1 B. 2 C. 3 D. 4 **ANS: D**
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 **ANS: A**

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8. Number of Channels required for controlling a Quadcopter is
A. 1 B. 3 C. 4 D. 5 **ANS: C**
9. Number of Channels required for controlling a Fixed wing UAV is
A. 5 B. 6 C. 4 D. 3 **ANS: D**
10. Function of Transmitter is
A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors **ANS: D**
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz **ANS: B**
12. The type of battery mostly used in small Quadcopter is
A. Alkaline Battery B. Lithium – Ion Battery C. Nickel – Metal Hydride D. Nickel – Cadmium Batteries **ANS: B**
13. The type of motor used for actuating mechanism in fixed wing UAVs is
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor **ANS: A**
14. The type of motor used in Quadcopter for its flight is
A. Servo motor B. Series motor C. BLDC D. Stepper motor **ANS: C**
15. The function of receiver is
A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board **ANS: D**



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Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Course Summary with Course Outcome

Course Name	: Workshop on UAV
Course Duration	: 35 Hours
Course type	: Self framed Add-On course
Year offered	: Second Year Aeronautical Students
Academic Year	: 2021-2022
Date	: From 04/10/2021 to 08/10/2021
Course Instructor & Designation	: Mr. Prem Kishore Assistant Professor Department of Aeronautical Engineering

Course outcome

Students could understand the basic parts of a UAV and study their assembly. Hands-on training was given to them on assembly and flying was done in detail. Different systems associated with the vehicle were also studied.

Assessment Mode

Attendance	: 35 Hrs.
Number of Participants	: 40
Scheme of exam	: Physical Answer sheet mode
Date of exam	: 08/10/2021

Course Coordinator

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Add-On Course AO21001-WORKSHOP ON UAV
Academic Year: 2021-22

Course Coordinator Report

Course Name	: Workshop on UAV
Course Duration	: 35 Hours
Year offered	: 2 nd Year Aeronautical Students
Course Coordinator	: Mr. Al Ameen H. (Assistant Professor/ AO)
Course type	: Self framed course

The Add-On course of 'Workshop on UAV' was conducted for the Second year Aeronautical Engineering Students (batch-2020-24). The total period of 35 Hrs. has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled	: 40
Number of students Appeared	: 40
Scheme of exam	: Physical Answer sheet mode
Date of exam	: 08/10/2021
Number of students Passed	: 40

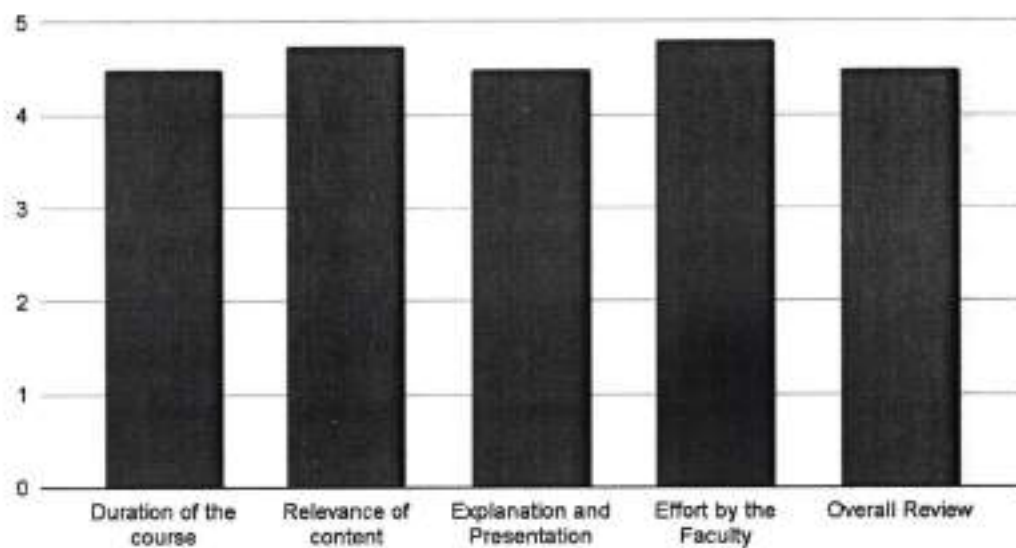
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Course Feedback

The feedback was obtained from the participants after the course and a detailed analysis report is listed below.

Points scored



Course Coordinator

HOD



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Certificate of Appreciation

IS PRESENTED TO

ANAMIKA S JITH

for successfully completing the
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held from 04/10/2021 TO 08/10/2021 by ACE College Of Engineering, Trivandrum.

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Sabu S Joseph
JOSEPH

Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.

Newton V

Coordinator

MR. NEWTON V





Certificate of Appreciation

IS PRESENTED TO

AKASH A S

for successfully completing the

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held from 04/10/2021 TO 08/10/2021 by ACE College Of Engineering, Trivandrum.


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Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.



Coordinator
MR. NEWTON V





Certificate of Appreciation

IS PRESENTED TO
ALIF MOHAMMED S

for successfully completing the
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Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.



Coordinator
MR. NEWTON V





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SATHEESHKUMAR S

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Convener
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HOD, Aeronautical. Dept.


Coordinator
MR. NEWTON V





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for successfully completing the
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Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.


Coordinator

MR. NEWTON V

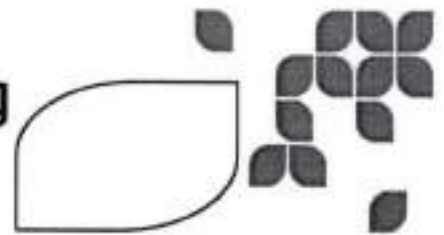




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From

The Head of the Department,
Department of Aeronautical Engineering,
ACE College of Engineering, Trivandrum

To

The Principal
ACE College of Engineering,
Trivandrum

Respected Sir

Sub: Permission for conducting an Add-on Certification Course-'Aeromodelling and Water Rocketry' Reg:-

The department of Aeronautical Engineering has planned to conduct a Five day Add-on Course named 'Aeromodelling and Water Rocketry' for first year students of our department, from 21/02/2022 to 25/02/2022. **Mr. Sanjay Satish**, Assistant Professor of Department of Aeronautical Engineering of our college is the resource person for this 35 hour programme. The venue will be drawing hall and we will be providing certificates to those who complete the programme. The detailed course content and schedule is attached herewith for your kind approval.

Thanking You


Yours Truly

ACE TVM,
07/02/2022




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DEPARTMENT OF AERONAUTICAL ENGINEERING

Circular

Date: 10/02/2022

We are extremely happy to inform you that the Department of Aeronautical Engineering will be conducting a 5 day Add-on course on 'Aeromodelling and Water Rocketry' for First year students of Aeronautical Engineering at Drawing hall, ACE College of Engineering from 21/02/2022 to 25/02/2022. This is a value added course, off from your curriculum and certificates will be issued to those who complete. Rest of the details of the programme and the schedule is put on the notice board, for you reference.

Students are requested to register & attend the program. Fullest cooperation is solicited for the successful conduct of the training.

Coordinator



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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-AEROMODELLING AND WATER ROCKETRY
Academic Year: 2021-22

Course Contents

Course Name: - Aeromodelling and Water Rocketry

Course Type: - Add-On course

Course description: - The course is intended to add up to curriculum to introduce into the field of Aeronautical Engineering. The course will make students build their own gliders and water rockets. The course is designed to give knowledge as well a room to apply their knowledge. More time is allocated to practical sessions to make students have more hands on experience. There is flying sessions where individual students could get an opportunity to make their product fly. This will impart curiosity as well interest in their rest of the studies ahead. The water rocketry sessions will impart interest in aerospace field also with basics being explained and experimented. The details of each day, different sessions is as follows.

Day	Session	Topic	Hours	Type
1	Session-1	Introduction to Aeromodelling - Static and Flying models - Explore different categories	1hrs	PPT & Videos
	Session-2	Physics of Flight - Overview of Flight Control Surfaces - Evolutions of control systems - Evolution of communication systems	2hrs	PPT & Videos
1	Session-3	Materials for Aeromodelling. Description of Five UAVs, discussion their aerodynamics characteristics, range, endurance, stealth characteristics, missions undergone, load carrying capacities.	1.5hrs	PPT & Videos



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Thiruvananthapuram, Kerala

	Session-4	Queries Student can clarify their ideas and one to one interaction is provided.	1hrs	
2	Session-1	Introduction to Glider. • Purpose • Parts • Applications • Recent trends and developments	1hrs	PPT
	Session-2	Physics of Flight and control of flight • ESC • Flight Controller Board • BLDC motor • Receiver • Transmitter • Li-po Battery	2hrs	PPT
	Session-3	Familiarization of tools and cutting techniques The different components Frame & Legs, ESC, Flight Controller Board, BLDC motor, Receiver, Transmitter, Li-po Battery, etc. are shared with students to have look on and identify.	1.5hrs	Hands-on
	Session-4	Kit supply and selection of Glider configuration.	1hrs	
3	Session-1	Design of Glider. The students are made to form groups having maximum of 7 students in each group. The required raw materials are given to students and are guided to assemble to form a fully functional Quadcopter.	3hrs	Hands-on
	Session-2	Construction and assembly of glider Each Quadcopter is checked prior to flying and instruction are given regarding the safe operation and allowed to fly in restricted environment.	2.5hrs	Hands-on
4	Session-1	Flying session. The students are made to form groups having maximum of 7 students in each group. The required raw materials are given to students and are guided to assemble to form a fully functional fixed wing UAV.	1hrs	Hands on



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	Session-2	Introduction to Water Rocket. Each Quadcopter is checked prior to flying and instruction are given regarding the safe operation and allowed to fly in restricted environment.	2hrs	Hands-on
	Session-3	Construction of water rocket	1.5hrs	
	Session-4	Construction of launching mechanism	1hrs	
5	Session-1	Flying session. The students are made to form groups having maximum of 7 students in each group. They are given assignment to bring up with an innovation they could make in the field of UAV. Each group after discussion with group members should come up with one is mandatory.	1hrs	Interactive
	Session-2	Launching session. Each group is allowed to present their innovation by any means of presentation.	2hrs	Interactive
	Session-3	Assessment The students are given assessment question having 15 question, each carrying 1 mark each. Student scoring min 10 marks will be declared to have passed and will be given certificate.	1.5hrs	Interactive
	Session-4	Feedback The students are given feedback sheets for the assessment of programme and also interactive session will be provided to comment on conduction of programme. End of Programme Certificates will be Issued.	1hrs	Interactive

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Coordinator



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30/05/2020

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Add-On Course AO21002-AEROMODELING AND WATER ROCKETRY
Academic Year: 2021-22

Resource Person Profile



Resource Person Name	: Mr. Sanjay Satish
Designation	: Assistant Professor, Department of Aeronautical Engineering
Specialization	: M.Tech Propulsion Engineering
Areas of Interest	: Hypersonic, Mechanism of machines
Teaching Experience	: 1 years
Email ID	: sanjay.satish@acetvm.com

Coordinator



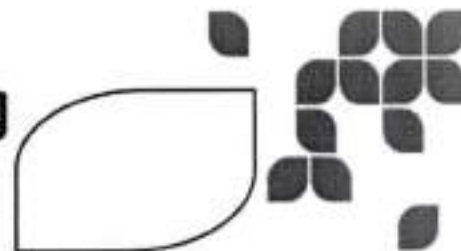
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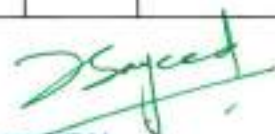
Add-On Course AO21002-AEROMODELLING AND WATER ROCKETRY
Academic Year: 2021-22

Time Table

Sl. No	Date	9.00 am-10.00 am		10.15 am-12.35 pm		1.30 pm-3.00 pm		3.10 pm-4.10 pm
1	21/02/2022	Session-1 Introduction to Aeromodelling	Break 15 min	Session -2 Physics of Flight	Lunch Break 12.35pm -1.25pm	Session -3 Materials for Aeromodelling.	Break 10 min	Session -4 Queries.
2	22/02/2022	Session-1 Introduction to Glider.		Session-2 Physics of Flight and control of flight.		Session-3 Familiarization of tools and cutting techniques.		Session- Kit supply and selection of Glider configuration.
3	23/02/2022	Session -1 Design of Glider.		Session -1 Design of Glider.		Session -2 Construction and assembly of glider		Session -2 Construction and assembly of glider
4	24/02/2022	Session-1 Flying session.		Session-2 Introduction to Water Rocket.		Session -3 Construction of water rocket.		Session -4 Construction of launching mechanism.
5	25/02/2022	Session-1 Flying session.		Session-2 Launching session.		Session -3 Assessment.		Session -4 Feedback.



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Aeromodelling & Water Rocketry



Duration: 21/02/2022 - 25/02/2022

Resource Person

Mr. Sanjay Satish

Convener (HOD)

Mr. Sabu S. Joseph

Coordinator
(Assistant Professor)

Mr. Al Ameen H.

Patron

Dr. Farrukh Sayeed
Principal



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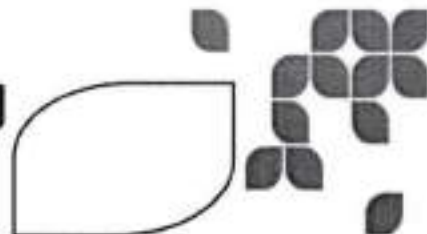




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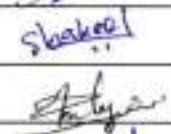
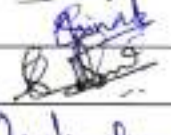
DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-AEROMODELING AND WATER ROCKETRY
Academic Year: 2021-22

Students Enrolled List

Sl. No.	Register Number	Name	Signature
1.	ACE21AO001	AJEESH A	
2.	ACE21AO002	AKHILA RAJ	
3.	ACE21AO003	ALAN SHIBU	
4.	ACE21AO004	ALEENA KRISHNAN	
5.	ACE21AO005	ANTO LUKOSE SINGH	
6.	ACE21AO006	ARAVIND A S	
7.	ACE21AO007	ASHEAK NEHA N	
8.	ACE21AO009	DIYA V NAMBIAR	
9.	ACE21AO010	FADIL MUHAMMED HAPHIS	
10.	ACE21AO011	FARSANA K R	
11.	ACE21AO012	GAVIN GEORGE LEARNST	
12.	ACE21AO014	JITHIN A	
13.	ACE21AO015	KRISHNA PRAKASH	
14.	ACE21AO016	LAKSHMI NARAYAN ANIL	
15.	ACE21AO017	MERGU RUSHIKESH VIVEKANAND	
16.	ACE21AO018	MIDHUN THOMAS	
17.	ACE21AO019	MOHAMMED ANSHAB	
18.	ACE21AO020	NANDA AJITH	
19.	ACE21AO021	NANDA A S	
20.	ACE21AO022	NANDANA T S	
21.	ACE21AO023	REVATHI VIJAYAN	
22.	ACE21AO024	RIYA GEORGE	
23.	ACE21AO025	RUMAILA L	
24.	ACE21AO026	RUQZANA	

Principal,
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25.	ACE21AO027	SAFA A	
26.	ACE21AO028	SAGAR XAVIER	
27.	ACE21AO029	SHAKEEL AHAMMED	
28.	ACE21AO030	SHARAFIYA R	
29.	ACE21AO031	SHINAS S	
30.	ACE21AO032	SREELEKSHMI P	
31.	ACE21AO033	UNNIKRISHNAN V J	



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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-AEROMODELING AND WATER ROCKETRY
Academic Year: 2021-22

Attendance Sheet

Sl. No.	Name	21/02/2022	22/02/2022	23/02/2022	24/02/2022	25/02/2022
1	AJEESH A					
2	AKHILA RAJ					
3	ALAN SHIBU					
4	ALEENA KRISHNAN					
5	ANTO LUKOSE SINGH		AB			
6	ARAVIND A S					
7	ASHEAK NEHA N				AB	
8	DIYA V NAMBIAR					
9	FADIL MUHAMMED HAPHIS			AB		
10	FARSANA K R					
11	GAVIN GEORGE LEARNST					
12	JITHIN A					

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13	KRISHNA PRAKASH	Kp	Kp	Kp	Kp	Kp
14	LAKSHMI NARAYAN ANIL	Lakshmi Narayan	Lakshmi Narayan	Lakshmi Narayan	Lakshmi Narayan	Lakshmi Narayan
15	MERGU RUSHIKESH VIVEKANAND	Mergu	Mergu	Mergu	Mergu	Mergu
16	MIDHUN THOMAS	Midhun	Midhun	Midhun	Midhun	Midhun
17	MOHAMMED ANSHAB	Manshab	Manshab	AB	Manshab	Manshab
18	NANDA AJITH	Nanda	AB	Nanda	Nanda	Nanda
19	NANDA A S	Nanda	Nanda	Nanda	Nanda	Nanda
20	NANDANA T S	Nandana	Nandana	Nandana	Nandana	Nandana
21	REVATHI VIJAYAN	Revathi	Revathi	Revathi	Revathi	Revathi
22	RIYA GEORGE	Riya	Riya	Riya	Riya	Riya
23	RUMAILA L	Rumaila	Rumaila	Rumaila	Rumaila	Rumaila
24	RUQZANA	Ruqzana	Ruqzana	Ruqzana	Ruqzana	Ruqzana
25	SAFA A	Safa	Safa	Safa	Safa	Safa
26	SAGAR XAVIER	Sagar	Sagar	Sagar	Sagar	Sagar
27	SHAKEEL AHAMMED	Shakeel	Shakeel	Shakeel	Shakeel	Shakeel
28	SHARAFIYA R	Sharafiya	Sharafiya	Sharafiya	Sharafiya	Sharafiya
29	SHINAS S	Shinas	Shinas	Shinas	Shinas	Shinas
30	SREELEKSHMI P	Sreelekshmi	Sreelekshmi	Sreelekshmi	Sreelekshmi	Sreelekshmi
31	UNNIKRISHNAN V J	Unnikrishnan	Unnikrishnan	Unnikrishnan	Unnikrishnan	Unnikrishnan

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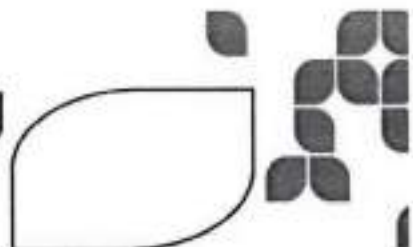
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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-AEROMODELING AND WATER ROCKETRY
Academic Year: 2021-22

Course Completed Students List

Sl. No.	Register Number	Name	Course Completion
1	ACE21AO001	AJEESH A	✓
2	ACE21AO002	AKHILA RAJ	✓
3	ACE21AO003	ALAN SHIBU	✓
4	ACE21AO004	ALEENA KRISHNAN	✓
5	ACE21AO005	ANTO LUKOSE SINGH	✓
6	ACE21AO006	ARAVIND A S	✓
7	ACE21AO007	ASHEAK NEHA N	✓
8	ACE21AO009	DIYA V NAMBIAR	✓
9	ACE21AO010	FADIL MUHAMMED HAPHIS	✓
10	ACE21AO011	FARSANA K R	✓
11	ACE21AO012	GAVIN GEORGE LEARNEST	✓
12	ACE21AO014	JITHIN A	✓
13	ACE21AO015	KRISHNA PRAKASH	✓
14	ACE21AO016	LAKSHMI NARAYAN ANIL	✓
15	ACE21AO017	MERGU RUSHIKESH VIVEKANAND	✓
16	ACE21AO018	MIDHUN THOMAS	✓
17	ACE21AO019	MOHAMMED ANSHAB	✓
18	ACE21AO020	NANDA AJITH	✓
19	ACE21AO021	NANDA A S	✓
20	ACE21AO022	NANDANA T S	✓
21	ACE21AO023	REVATHI VIJAYAN	✓
22	ACE21AO024	RIYA GEORGE	✓
23	ACE21AO025	RUMAILA L	✓
24	ACE21AO026	RUQZANA	✓
25	ACE21AO027	SAFA A	✓
26	ACE21AO028	SAGAR XAVIER	✓

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27	ACE21AO029	SHAKEEL AHAMMED	✓
28	ACE21AO030	SHARAFIYA R	✓
29	ACE21AO031	SHINAS S	✓
30	ACE21AO032	SREELEKSHMI P	✓
31	ACE21AO033	UNNIKRISHNAN V J	✓

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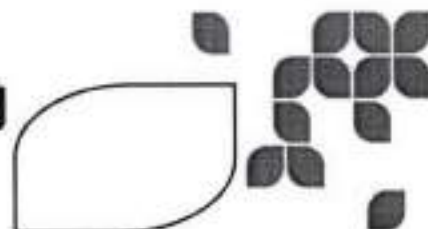
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Add-On Course AO21002-Aeromodelling & Water Rocketry Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student:..... Semester:.....

Date:.....

Questions

1. Which of the following woods can be used for Aeromodelling?
A. Balsa wood B. Teak wood C. Fir wood D. Palm wood **ANS:**
2. Which control is used during take-off mainly?
A. Rudder B. Aileron C. Flaps D. Trim tabs **ANS:**
3. Which control is used during rolling?
A. Rudder B. Flaps C. Aileron D. Trim tabs **ANS:**
4. Which control is used during pitching?
A. Rudder B. Trim tabs C. Aileron D. Horizontal Stabilizer **ANS:**
5. Which control is used during Yawing?
A. Trim tabs B. Horizontal Stabilizer C. Aileron D. Rudder **ANS:**
6. The type of motor used for actuating mechanism wing controls
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor **ANS:**
7. The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 **ANS:**
8. Number of Channels required for controlling Glider
A. 1 B. 3 C. 4 D. 5 **ANS:**

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-Aeromodelling and Water Rockery

Academic Year: 2021-22

Assessment Marks

Sl. No.	Register Number	Name	Marks (15)
1	ACE21AO001	AJEESH A	15
2	ACE21AO002	AKHILA RAJ	14
3	ACE21AO003	ALAN SHIBU	15
4	ACE21AO004	ALEENA KRISHNAN	15
5	ACE21AO005	ANTO LUKOSE SINGH	14
6	ACE21AO006	ARAVIND A S	14
7	ACE21AO007	ASHEAK NEHA N	15
8	ACE21AO009	DIYA V NAMBIAR	15
9	ACE21AO010	FADIL MUHAMMED HAPHIS	15
10	ACE21AO011	FARSANA K R	15
11	ACE21AO012	GAVIN GEORGE LEARNST	15
12	ACE21AO014	JITHIN A	15
13	ACE21AO015	KRISHNA PRAKASH	15
14	ACE21AO016	LAKSHMI NARAYAN ANIL	14
15	ACE21AO017	MERGU RUSHIKESH VIVEKANAND	14
16	ACE21AO018	MIDHUN THOMAS	15
17	ACE21AO019	MOHAMMED ANSHAB	15
18	ACE21AO020	NANDA AJITH	14
19	ACE21AO021	NANDA A S	15
20	ACE21AO022	NANDANA T S	15
21	ACE21AO023	REVATHI VIJAYAN	15
22	ACE21AO024	RIYA GEORGE	15
23	ACE21AO025	RUMAILA L	15
24	ACE21AO026	RUQZANA	15
25	ACE21AO027	SAFA A	15
26	ACE21AO028	SAGAR XAVIER	14
27	ACE21AO029	SHAKEEL AHAMMED	15

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28	ACE21AO030	SHARAFIYA R	15
29	ACE21AO031	SHINAS S	13
30	ACE21AO032	SREELEKSHMI P	15
31	ACE21AO033	UNNIKRISHNAN V J	15

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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-Aeromodelling & Water Rocketry
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: NIRANJAN T H Semester: 1

Date: 25/01/22

Questions

- Which of the following woods can be used for Aeromodelling?
A. Balsa wood B. Teak wood C. Fir wood D. Palm wood ANS: A
- Which control is used during take-off mainly?
A. Rudder B. Aileron C. Flaps D. Trim tabs ANS: C
- Which control is used during rolling?
A. Rudder B. Flaps C. Aileron D. Trim tabs ANS: C
- Which control is used during pitching?
A. Rudder B. Trim tabs C. Aileron D. Horizontal Stabilizer ANS: D
- Which control is used during Yawing?
A. Trim tabs B. Horizontal Stabilizer C. Aileron D. Rudder ANS: D
- The type of motor used for actuating mechanism wing controls
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor ANS: A
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 ANS: A
- Number of Channels required for controlling Glider
A. 1 B. 3 C. 4 D. 5 ANS: B



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9. Number of channels required for quadcopter
☒ A. 5 B. 6 C. 4 D. 3 ANS: C
10. Function of Transmitter is
☒ A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: B
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
☒ A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B
12. The type of battery mostly used in small Quadcopter is
☒ A. Alkaline battery B. Lithium-Ion Battery C. Nickel-Metal Hydride D. Nickel-Cadmium Batteries ANS: B
13. The type of motor used for actuating mechanism
☒ A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: B
14. The type of motor used in Glider for its flight is
☒ A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C
15. The function of receiver is
☒ A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

=====

Score secured: 12/15

Name of Evaluator: Noufal
 Designation: A.P

Signature: *[Handwritten Signature]*



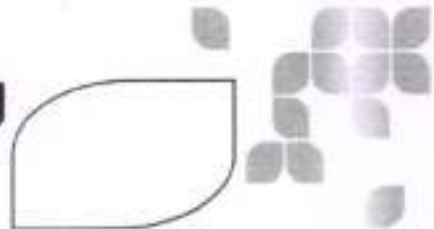
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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-Aeromodelling & Water Rocketry
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: Nidhin Tharuv Semester:I.....

Date: 15/02/2022

Questions

- Which of the following woods can be used for Aeromodelling?
A. Balsa wood B. Teak wood C. Fir wood D. Palm wood **ANS: A**
- Which control is used during take-off mainly?
A. Rudder B. Aileron C. Flaps D. Trim tabs **ANS: C**
- Which control is used during rolling?
A. Rudder B. Flaps C. Aileron D. Trim tabs **ANS: C**
- Which control is used during pitching?
A. Rudder B. Trim tabs C. Aileron D. Horizontal Stabilizer **ANS: D**
- Which control is used during Yawing?
A. Trim tabs B. Horizontal Stabilizer C. Aileron D. Rudder **ANS: D**
- The type of motor used for actuating mechanism wing controls
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor **ANS: A**
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 **ANS: A**
- Number of Channels required for controlling Glider
A. 1 B. 3 C. 4 D. 5 **ANS: B**



Sayed
ANS: B
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9. Number of channels required for quadcopter

- A. 5 B. 6 C. 1 D. 3 ANS: C

10. Function of Transmitter is

- A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: B

11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is

- A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B

12. The type of battery mostly used in small Quadcopter is

- A. Alkaline Battery B. Lithium-Ion Battery C. Nickel-Metal Hydride D. Nickel-Cadmium Batteries ANS: B

13. The type of motor used for actuating mechanism

- A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: A

14. The type of motor used in Glider for its flight is

- A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C

15. The function of receiver is

- A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

Score secured: 15/15

Name of Evaluator: Naupal

Designation: A.P

Signature: 

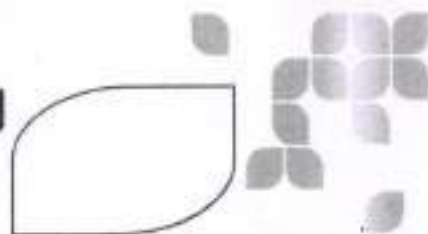



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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-Aeromodelling & Water Rocketry
 Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: AJEEESH Semester: 1

Date: 25/02/22

Questions

1. Which of the following woods can be used for Aeromodelling?
 A. Balsa wood B. Teak wood C. Fir wood D. Palm wood **ANS: A**
2. Which control is used during take-off mainly?
 A. Rudder B. Aileron C. Flaps D. Trim tabs **ANS: C**
3. Which control is used during rolling?
 A. Rudder B. Flaps C. Aileron D. Trim tabs **ANS: C**
4. Which control is used during pitching?
 A. Rudder B. Trim tabs C. Aileron D. Horizontal Stabilizer **ANS: D**
5. Which control is used during Yawing?
 A. Trim tabs B. Horizontal Stabilizer C. Aileron D. Rudder **ANS: D**
6. The type of motor used for actuating mechanism wing controls
 A. Servo motor B. Series motor C. Shunt motor D. Stepper motor **ANS: A**
7. The propeller with _____ of blades is used usually in Quadcopter.
 A. 2 B. 3 C. 4 D. 6 **ANS: A**
8. Number of Channels required for controlling Glider
 A. 1 B. 3 C. 4 D. 5 **ANS: B**



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9. Number of channels required for quadcopter
 A. 5 B. 6 C. 4 D. 3 ANS: C
10. Function of Transmitter is
 A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: B
11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
 A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B
12. The type of battery mostly used in small Quadcopter is
 A. Alkaline Battery B. Lithium - Ion Battery C. Nickel - Metal Hydride D. Nickel - Cadmium Batteries ANS: B
13. The type of motor used for actuating mechanism
 A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: A
14. The type of motor used in Glider for its flight is
 A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C
15. The function of receiver is
 A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

Score secured: 15/15

Name of Evaluator: Naveed

Designation: A.P

Signature: 



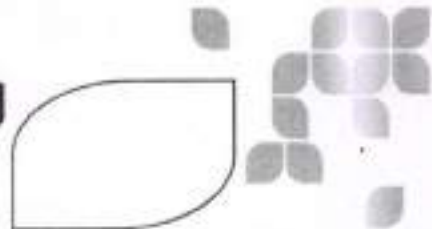
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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002-Aeromodelling & Water Rocketry
Academic Year: 2021-22

Assessment Questions

Instructions: Questions are of MCQ format. Answer the questions by writing the corresponding alphabet of your choice on ANS column provided. Answer all the questions. One mark for each questions.

Name of Student: ALAN Semester: 1

Date: 25/01/22

Questions

- Which of the following woods can be used for Aeromodelling?
A. Balsa wood B. Teak wood C. Fir wood D. Palm wood ANS: A
- Which control is used during take-off mainly?
A. Rudder B. Aileron C. Flaps D. Trim tabs ANS: C
- Which control is used during rolling?
A. Rudder B. Flaps C. Aileron D. Trim tabs ANS: C
- Which control is used during pitching?
A. Rudder B. Trim tabs C. Aileron D. Horizontal Stabilizer ANS: D
- Which control is used during Yawing?
A. Trim tabs B. Horizontal Stabilizer C. Aileron D. Rudder ANS: D
- The type of motor used for actuating mechanism wing controls
A. Servo motor B. Series motor C. Shunt motor D. Stepper motor ANS: A
- The propeller with _____ of blades is used usually in Quadcopter.
A. 2 B. 3 C. 4 D. 6 ANS: A
- Number of Channels required for controlling Glider
A. 1 B. 3 C. 4 D. 5 ANS: B



ANS: B
Praveen
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Thiruvananthapuram-695 027

9. Number of channels required for quadcopter
A. 5 B. 6 C. 4 D. 3 ANS: C

10. Function of Transmitter is
A. To transmit power to motor B. To transmit signal to Flight control board C. To transmit signal from Flight control board D. To transmit signal to motors ANS: B

11. The start frequency of ISM- Industrial, Scientific and Medical Radio Band is
A. 433.05 MHz B. 2.4 GHz C. 434.79 MHz D. 2.4835 GHz ANS: B

12. The type of battery mostly used in small Quadcopter is
A. Alkaline Battery B. Lithium - Ion Battery C. Nickel - Metal Hydride D. Nickel - Cadmium Batteries ANS: B

13. The type of motor used for actuating mechanism
A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: A

14. The type of motor used in Glider for its flight is
A. Servo motor B. Series motor C. BLDC D. Stepper motor ANS: C

15. The function of receiver is
A. To receive power from motor B. To receive power from flight control board C. To receive signal from flight control board D. To receive signal from Transmitter and transmit to board ANS: D

Score secured: 15/15

Name of Evaluator: *Nayal*

Designation: A.P

Signature: *Cyber*



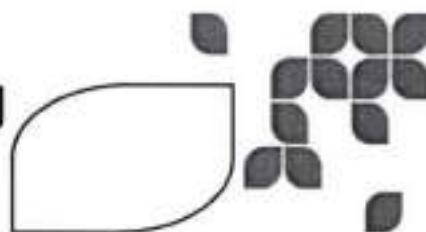
Nayal
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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002- AEROMODELLING AND WATER ROCKETRY

Course Summary

Course Name	: Aeromodelling and Water Rocketry
Course Duration	: 35 Hours
Course type	: Self framed Add-On course
Year offered	: Batch 2021-25 Aeronautical Students
Academic Year	: 2021-2022
Date	: From 21/02/2022 to 25/02/2022
Course Instructor	: Mr. Sanjay Satish
& Designation	Assistant Professor Department of Aeronautical Engineering

Course outcome

Students could understand the basics of Aeromodelling and Water Rocketry. Hands-on training was given to them in detail. Different systems associated with the construction of glider and water rocket were also studied.

Assessment Mode

Attendance	: 35 Hrs
Number of Participants	: 31
Scheme of exam	: Physical Answer sheet mode
Date of exam	: 25/02/2022

Course Coordinator

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HOD



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DEPARTMENT OF AERONAUTICAL ENGINEERING

Add-On Course AO21002- AEROMODELLING AND WATER ROCKETRY
Academic Year: 2021-22

Course Coordinator Report

Course Name	: Aeromodelling and Water Rocketry
Course Duration	: 35 Hours
Year offered	: 1 st Year Aeronautical Students
Course Coordinator	: Mr. Al Ameen H. (Assistant Professor/ AO)
Course type	: Self framed add-on course

The Certificate program of 'Aeromodelling and Water Rocketry' was conducted for the First year Aeronautical Engineering Students. The total period of 35 Hrs. has been planned and executed as per the course plan.

Assessment Mode

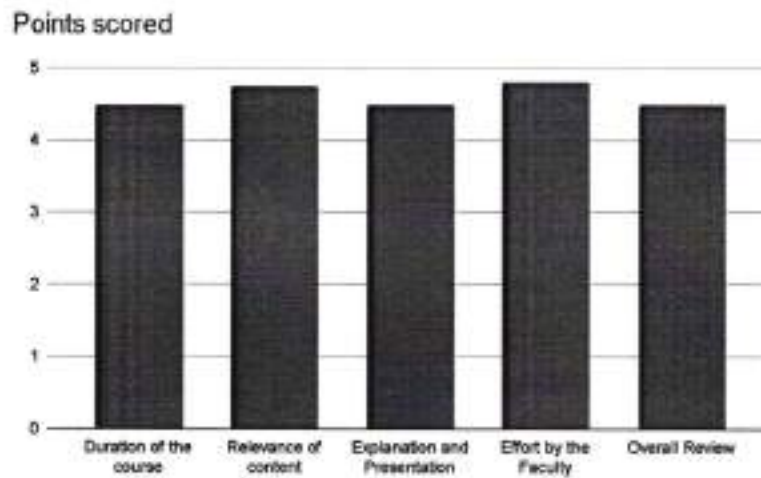
Number of students Enrolled	: 31
Number of students Appeared	: 31
Scheme of exam	: Physical Answer sheet mode
Date of exam	: 25/02/2022
Number of students Passed	: 31



Signature
F. ICHAL
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Course Feedback

The feedback was obtained from the participants after the course and a detailed analysis report is listed below.



Course Coordinator

HOD



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Certificate of Appreciation

IS PRESENTED TO

MOHAMMED ANSHAB

for successfully completing the course on **AEROMODELLING AND WATER ROCETRY**
held from 21/02/2022 TO 25/02/2022 by ACE College Of Engineering, Trivandrum.


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Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.



Coordinator

MR. AL AMEEN H





Certificate of Appreciation

IS PRESENTED TO

FARSANA K R

for successfully completing the course on **AEROMODELLING AND WATER ROCKETRY**
held from 21/02/2022 TO 25/02/2022 by ACE College Of Engineering, Trivandrum.


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J S C M

Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.



Coordinator

MR. AL AMEEN H





Certificate of Appreciation

IS PRESENTED TO

ASHEAK NEHA N

for successfully completing the course on **AEROMODELLING AND WATER ROCETRY**
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Sayant
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Thiruvananthapuram-695 057

Sabu S Joseph

Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.

Al Ameen H

Coordinator

MR. AL AMEEN H





Certificate of Appreciation

IS PRESENTED TO

ALEENA KRISHNAN

for successfully completing the course on **AEROMODELLING AND WATER ROCKETRY**
held from 21/02/2022 TO 25/02/2022 by ACE College Of Engineering, Trivandrum.

Sayed
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Thiruvananthapuram-695 022

Sabu S Joseph
JSJ

Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.

Al Ameen H

Coordinator

MR. AL AMEEN H





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Certificate of Appreciation

IS PRESENTED TO

LAKSHMI NARAYAN ANIL

for successfully completing the course on **AEROMODELLING AND WATER ROCETRY**
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Convener

MR. SABU S JOSEPH
HOD, Aeronautical. Dept.



Coordinator
MR. AL AMEEN H





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From

The Head of the Department,
Department of Electronics & Communication
Engineering,

ACE College of Engineering,
Trivandrum

To

The Principal
ACE College of Engineering,
Trivandrum

Respected Sir

Sub: Requisition to permit for conducting the Add-on Certification Course — Reg:-

We the department of Electronics and communication engineering planned to conduct 5 Days (35 Hrs.) training program on 'Python Programming(ECE21003)' for 2nd Year ECE Students at ACE College of Engineering. The certification will be given by the department. The Course date and schedule are listed below for your kind approval.

Schedule Details

Date		Batch
From	To	
21/2/2022	25/2/2022	2 nd Year ECE
2		

Thanking You

ACE TVM,
14/2/2022



Yours Truly

Principal,
ACE College of Engineering
Trivandrum-11
Trivandrum-686027



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Department of Electronics & Communication Engineering

Circular

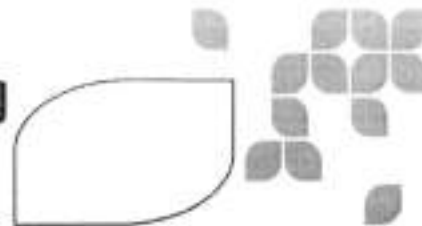
Date: 15/2/2022

We are extremely happy to inform that Electronics and communication engineering will be conducting 5 Days (35 Hrs.) training program on 'Python Programming(ECE21003)' for Third Year ECE Students at DSP Lab, ACE College of Engineering from 21/2/2022 to 25/2/2022. students are requested to register & attend the program. Fullst cooperation is solicited for the successful conduct of the training

Coordinator

HoD

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Course Contents for Python Programming (ECE21003)

Academic Year: 2021-22

SYLLABUS:

1 - Introduction to Python and Computer Programming

- Python - a tool, not a reptile (2 hrs)
- There is more than one Python (1 hr)
- Let's start our Python adventure(1 hr)

2 - Data Types, Variables, Basic Input-Output Operations, Basic Operators

- Your first program (1 hr)
- Python literals (1 hr)
- Operators - data manipulation tools (1 hr)
- Variables - data-shaped boxes (2hrs)
- How to talk to computer? (2 hrs)

3 - Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operations

- Making decisions in Python (1 hr)
- Python's loops (1 hr)
- Logic and bit operations in Python(1 hr)
- Lists - collections of data(1 hr)
- Sorting simple lists - the bubble sort algorithm(1 hr)
- Lists - some more details (1 hr)
- Lists in advanced applications(1 hr)

4 - Functions, Tuples, Dictionaries, and Data Processing

- Writing functions in Python (1 hr)
- How functions communicate with their environment (1 hr)
- Returning a result from a function(1 hr)
- Let's make some fun... sorry, functions (2 hrs)
- Tuples and dictionaries(2 hrs)

5 - Modules, Packages, String and List Methods, and Exceptions

- Using modules (1 hr)
- Some useful modules (1 hr)
- What is package? (1 hr)
- Errors - the programmer's daily bread (1 hr)
- The anatomy of exception (1 hr)
- Some of the most useful exceptions (2 hrs)
- String methods (1hr)
- Strings in action (1 hr)



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Profile of Resource Person

Mr. Anshad P K

(anshad.pk@acetvm.com)

Mr. Anshad. P K, Assistant Professor of Department of ECE, ACE College of Engineering, Thiruvallom with more than 9 years of teaching experience. He has several research papers in reputed national and international journals and conferences. He completed his internship at SAMEER, Mumbai.

Areas of Excellence:

- Python Programming
- Machine learning
- Deep learning
- Natural Language Processing
- Computer Vision
- Optical Communication




Course Coordinator


HoD

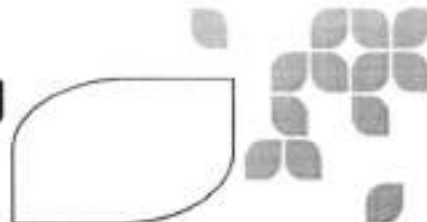

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Timetable for Python Programming (ECE21003)

Academic Year: 2021-22

DAY/ PERIOD	1	2	3	4		5	6	7
	8 :40 AM - 9: 35 AM	9:35 AM - 10: 30 AM	10 : 45 AM - 11: 40 AM	11 : 40 AM - 12 : 35 PM		1 :25 PM - 2 : 20 PM	2 : 20 PM - 3 :10 PM	3 : 20 PM - 4 : 10 PM
21/2/2022	Introduction to Python and Computer Programming • Python - a tool, not a reptile • There is more than one Python • Let's start our Python adventure				LUNCH 12.35PM - 1.25PM	Data Types, Variables, Basic Input-Output Operations, Basic Operators Your first program Python literals Operators - data manipulation tools		
22/2/2022	Data Types, Variables, Basic Input-Output Operations, Basic Operators • Variables - data-shaped boxes • How to talk to computer?					Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operation Making decisions in Python Python's loops Logic and bit operations in Python		
23/2/2022	Boolean Values, Conditional Execution, Loops, Lists and List Processing, Logical and Bitwise Operation Lists - collections of data Sorting simple lists - the bubble sort algorithm Lists - some more details Lists in advanced applications					Functions, Tuples, Dictionaries, and Data Processing Writing functions in Python How functions communicate with their environment? Returning a result from a function		
24/2/2022	Functions, Tuples, Dictionaries, and Data Processing Let's make some fun... sorry, functions Tuples and dictionaries					Modules, Packages, String and List Methods, and Exceptions Using modules Some useful modules What is package?		
25/2/2022	Modules, Packages, String and List Methods, and Exceptions Errors - the programmer's daily bread The anatomy of exception Some of the most useful exceptions					String methods Strings in action		FEEDBACK



Signature
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Python Programming

Department of
Electronics &
Communication
Engineering

```
self.logdupes = True
self.debug = debug
self.logger = logging.getLogger(__name__)
if path:
    self.file = open(os.path.join(path, 'fingerprints.log'), 'a')
    self.file.seek(0)
    self.fingerprints.update(request)

def __init__(self, cls, settings):
    self.settings = settings.gethost('supernode', 'supernode')
    return cls.job_dir(settings).debug

def request_seen(self, request):
    fp = self.request_fingerprint(request)
    if fp in self.fingerprints:
        return True
    self.fingerprints.add(fp)
    if self.file:
        self.file.write(fp + os.linesep)

def request_fingerprint(self, request):
    return request_fingerprint(request)
```

Duration: 21/2/2022 to 25/2/2022

Resource Person
Mr. Anshad P K

Coordinator
(Assistant Professor)
Afsal. S



Convener (HOD)
Dr. K. Rafeeq Ahmed

Patron
Dr. Farrukh Sayeed
Principal



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Enrolled Students List for Python Programming (ECE21003)

Academic Year: 2021-22

Date : 21/2/2022

Sl. No.	Register Number	Candidate Name	Signature
1.	ACE20EC001	ABHAY R	<i>Abhay</i>
2.	ACE20EC002	ADABIYA BEEGUM R	<i>Adabiya</i>
3.	ACE20EC003	AFRAN N	<i>Afran</i>
4.	ACE20EC004	AKSHAY S	<i>Akshay</i>
5.	ACE20EC005	AMILJITH J S	<i>Amil</i>
6.	ACE20EC006	APARNA SURESH A S	<i>Aparna</i>
7.	ACE20EC007	ASIF S	<i>Asif</i>
8.	ACE20EC008	ASIF SUHAIL M N	<i>Asif</i>
9.	ACE20EC009	ASIYA BEEVI S	<i>Asiya</i>
10.	ACE20EC010	ASWANTH B SUJAN	<i>Aswanth</i>
11.	ACE20EC011	ASWIN A	<i>Aswin</i>
12.	ACE20EC012	BENNY VARGHESE	<i>Benny</i>
13.	ACE20EC013	DEVADUTT MB	<i>Devadutt</i>
14.	ACE20EC014	FATHIMA R	<i>Fathima</i>
15.	ACE20EC015	GAYATHRI R	<i>Gayathri</i>
16.	ACE20EC016	JAYALEKSHMI J R	<i>Jayalekshmi</i>
17.	ACE20EC017	K.H.MINU	<i>Minu</i>
18.	ACE20EC018	KEERTHANA MOHAN U	<i>Keethana</i>
19.	ACE20EC020	MEGHNA SARKAR	<i>Megha</i>
20.	ACE20EC021	MOHAMED ABU RIFAS S	<i>Abu Rifas</i>
21.	ACE20EC022	MUHAMMED ISMAIL Z	<i>Muhammed Ismail</i>
22.	ACE20EC023	MUHAMMED SHEHIN	<i>Shehin</i>
23.	ACE20EC024	NITHISH B R	<i>Nithish</i>
24.	ACE20EC025	SAFIYA S	<i>Safiya</i>





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Thiruvananthapuram



Enrolled Students List for Python Programming

Academic Year: 2021-22

Date : 21/2/2022

Sl. No.	Register Number	Candidate Name
25.	ACE20EC026	SHEENMON BS
25.	ACE20EC027	SHERIN SHA N
26.	ACE20EC028	SINDHU S
27.	ACE20EC029	SUHDHA SULFI
28.	ACE20EC031	TUSHAR KRISHNAN MORE
29.	ACE20EC032	VIPUL V V

Sheenmon
Sherin
Sindhu
Suhadasulfi
Tushar
Vipul





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Attendance Sheet for Python Programming (ECE21003)

Academic Year: 2021-22

Course from 21/2/2022 to 25/2/2022

Sl. No.	Student Name	Kindly Sign Against your Name				
		21/2/2022	22/2/2022	23/2/2022	24/2/2022	25/2/2022
1.	ABHAY R	<u>Abhay</u>	<u>Abhay</u>	<u>Abhay</u>	<u>Abhay</u>	<u>Abhay</u>
2.	ADABIYA BEEGUM R	<u>Adabiya</u>	<u>Adabiya</u>	<u>Adabiya</u>	<u>Adabiya</u>	A
3.	AFRAN N	<u>Afran</u>	<u>Afran</u>	A	A	<u>Afran</u>
4.	AKSHAY S	<u>AS</u>	<u>AS</u>	<u>AS</u>	<u>AS</u>	<u>AS</u>
5.	AMILIITH J S	<u>Amil</u>	<u>Amil</u>	<u>Amil</u>	<u>Amil</u>	<u>Amil</u>
6.	APARNA SURESH A S	<u>Aparna</u>	<u>Aparna</u>	<u>Aparna</u>	<u>Aparna</u>	<u>Aparna</u>
7.	ASIF S	<u>Asif</u>	<u>Asif</u>	<u>Asif</u>	<u>Asif</u>	<u>Asif</u>
8.	ASIF SUHAIL M N	<u>Asif</u>	<u>Asif</u>	<u>Asif</u>	<u>Asif</u>	<u>Asif</u>
9.	ASIYA BEEVI S	<u>Asiya</u>	<u>Asiya</u>	<u>Asiya</u>	<u>Asiya</u>	<u>Asiya</u>
10.	ASWANTH B SUJAN	<u>Aswanth</u>	<u>Aswanth</u>	<u>Aswanth</u>	<u>Aswanth</u>	<u>Aswanth</u>
11.	ASWIN A	<u>As</u>	<u>As</u>	<u>As</u>	<u>As</u>	<u>As</u>
12.	BENNY VARGHESE	<u>Benny</u>	<u>Benny</u>	<u>Benny</u>	<u>Benny</u>	<u>Benny</u>
13.	DEVADUTT MB	A	A	<u>Devadutt</u>	<u>Devadutt</u>	<u>Devadutt</u>
14.	FATHIMA R	<u>Fathima</u>	<u>Fathima</u>	<u>Fathima</u>	<u>Fathima</u>	<u>Fathima</u>
15.	GAYATHRI R	<u>Gayathri</u>	<u>Gayathri</u>	<u>Gayathri</u>	<u>Gayathri</u>	<u>Gayathri</u>
16.	JAYALEKSHMI J R	<u>Jayalekshmi</u>	<u>Jayalekshmi</u>	<u>Jayalekshmi</u>	<u>Jayalekshmi</u>	<u>Jayalekshmi</u>
17.	K.H.MINU	<u>Minu</u>	<u>Minu</u>	<u>Minu</u>	<u>Minu</u>	<u>Minu</u>
18.	KEERTHANA MOHAN U	<u>Keethana</u>	<u>Keethana</u>	<u>Keethana</u>	<u>Keethana</u>	<u>Keethana</u>
19.	MEGHNA SARKAR	<u>Megha</u>	<u>Megha</u>	<u>Megha</u>	<u>Megha</u>	<u>Megha</u>
20.	MOHAMED ABU RIFAS S	<u>Mohamed</u>	<u>Mohamed</u>	<u>Mohamed</u>	<u>Mohamed</u>	<u>Mohamed</u>
21.	MUHAMMED ISMAIL Z	<u>Muhammed</u>	A	A	<u>Muhammed</u>	<u>Muhammed</u>
22.	MUHAMMED SHEHIN	<u>Shehin</u>	<u>Shehin</u>	A	A	<u>Shehin</u>
23.	NATHISH B R	<u>Nathish</u>	<u>Nathish</u>	<u>Nathish</u>	<u>Nathish</u>	<u>Nathish</u>
24.	SAFIYA S	<u>Safiya</u>	<u>Safiya</u>	<u>Safiya</u>	<u>Safiya</u>	<u>Safiya</u>
25.	SHEENMON BS	<u>Sheenmon</u>	<u>Sheenmon</u>	<u>Sheenmon</u>	<u>Sheenmon</u>	<u>Sheenmon</u>



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Attendance Sheet for Python Programming

Academic Year: 2021-22

Course from 21/2/2022 to 25/2/2022

Sl. No.	Student Name	Kindly Sign Against your Name				
		21/2/2022	22/2/2022	23/2/2022	24/2/2022	25/2/2022
26.	SHERIN SHA N	A	A	Sherein	Sherein	Sherein
27.	SINDHU S	Sindhu	Sindhu	Sindhu	Sindhu	Sindhu
28.	SUHDHA SULFI	Subhade	Subhade	Subhade	Subhade	Subhade
29.	TUSHAR KRISHNAN MORE	Tushar	Tushar	Tushar	Tushar	Tushar
30.	VIPUL V V	Vipul	Vipul	Vipul	Vipul	Vipul



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Completed Students List for Python Programming (ECE21003)

Academic Year: 2021-22

Date : 21/2/2022

Sl. No.	Register Number	Candidate Name	Completed
1.	ACE20EC001	ABHAY R	✓
2.	ACE20EC002	ADABIYA BEEGUM R	✓
3.	ACE20EC003	AFRAN N	✓
4.	ACE20EC004	AKSHAY S	✓
5.	ACE20EC005	AMILJITH J S	✓
6.	ACE20EC006	APARNA SURESH A S	✓
7.	ACE20EC007	ASIF S	✓
8.	ACE20EC008	ASIF SUHAIL M N	✓
9.	ACE20EC009	ASIYA BEEVI S	✓
10.	ACE20EC010	ASWANTH B SUJAN	✓
11.	ACE20EC011	ASWIN A	✓
12.	ACE20EC012	BENNY VARGHESE	✓
13.	ACE20EC013	DEVADUTT MB	✓
14.	ACE20EC014	FATHIMA R	✓
15.	ACE20EC015	GAYATHRI R	✓
16.	ACE20EC016	JAYALEKSHMI J R	✓
17.	ACE20EC017	K.H.MINU	✓
18.	ACE20EC018	KEERTHANA MOHAN U	✓
19.	ACE20EC020	MEGHNA SARKAR	✓
20.	ACE20EC021	MOHAMED ABU RIFAS S	✓
21.	ACE20EC022	MUHAMMED ISMAIL Z	✓
22.	ACE20EC023	MUHAMMED SHEHIN	✓
23.	ACE20EC024	NITHISH B R	✓
24.	ACE20EC025	SAFIYA S	✓



Signature

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Signature



Enrolled Students List for Python Programming

Academic Year: 2021-22

Date : 21/2/2022

Sl. No.	Register Number	Candidate Name	Completed
25.	ACE20EC026	SHEENMON BS	√
25.	ACE20EC027	SHERIN SHA N	√
26.	ACE20EC028	SINDHU S	√
27.	ACE20EC029	SUHDHA SULFI	√
28.	ACE20EC031	TUSHAR KRISHNAN MORE	√
29.	ACE20EC032	VIPUL V V	√



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Assessment Questions for Python Programming (ECE21003)

Academic Year: 2021-22

This set of IOT Multiple Choice Questions focuses on Python Programming

1. Who developed Python Programming Language?
 - a) Wick van Rossum
 - b) Rasmus Lerdorf
 - c) Guido van Rossum
 - d) Niene Stom
2. Which type of Programming does Python support?
 - a) object-oriented programming
 - b) structured programming
 - c) functional programming
 - d) all of the mentioned
3. Is Python case sensitive when dealing with identifiers?
 - a) no
 - b) yes
 - c) machine dependent
 - d) none of the mentioned
4. Which of the following is the correct extension of the Python file?
 - a) .python
 - b) .pl
 - c) .py
 - d) .p
5. Is Python code compiled or interpreted?
 - a) Python code is both compiled and interpreted
 - b) Python code is neither compiled nor interpreted
 - c) Python code is only compiled
 - d) Python code is only interpreted
6. All keywords in Python are in _____.
 - a) Capitalized
 - b) lower case
 - c) UPPER CASE
 - d) None of the mentioned



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7. What will be the value of the following Python expression?
 $4 + 3 \% 5$
- a) 7
 - b) 2
 - c) 4
 - d) 1
8. Which of the following is used to define a block of code in Python language?
- a) Indentation
 - b) Key
 - c) Brackets
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9. Which keyword is used for function in Python language?
- a) Function
 - b) Def
 - c) Fun
 - d) Define
10. Which of the following character is used to give single-line comments in Python?
- a) //
 - b) #
 - c) !
 - d) /*



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10

Fathima . R

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Assessment Questions for Python Programming (ECE21003)
Academic Year: 2021-22

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Assessment Questions for Python Programming (ECE21003)
Academic Year: 2021-22

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S. S. S.
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9

Afsan. N

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Assessment Questions for Python Programming(ECE21003)
Academic Year: 2021-22

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2 Sayant

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9

Abhay . R

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Assessment Questions for Python Programming (ECE21003)
Academic Year: 2021-22

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S. S. S.

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Assessment Questions for Python Programming (ECE21003)
Academic Year: 2021-22

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 - d) None of the mentioned ✓



Gayathri



7. What will be the value of the following Python expression?
 $4 * 3 \% 5$
a) 7 ✓
b) 2
c) 4
d) 1
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d) /*



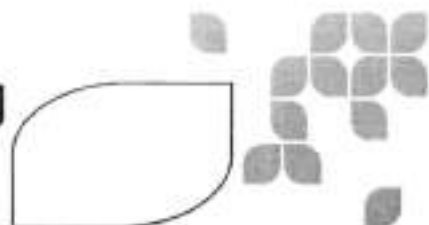

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Assessment Marks for Python Programming (ECE21003)

Academic Year: 2021-22

Date : 28/2/2022

SL. No.	Register Number	Candidate Name	Marks out of 10
1.	ACE20EC001	ABHAY R	9
2.	ACE20EC002	ADABIYA BEEGUM R	10
3.	ACE20EC003	AFRAN N	9
4.	ACE20EC004	AKSHAY S	10
5.	ACE20EC005	AMILJITH J S	10
6.	ACE20EC006	APARNA SURESH A S	10
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10.	ACE20EC010	ASWANTH B SUJAN	9
11.	ACE20EC011	ASWIN A	10
12.	ACE20EC012	BENNY VARGHESE	10
13.	ACE20EC013	DEVADUTT MB	9
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18.	ACE20EC018	KEERTHANA MOHAN U	10
19.	ACE20EC020	MEGHNA SARKAR	10
20.	ACE20EC021	MOHAMED ABU RIFAS S	8
21.	ACE20EC022	MUHAMMED ISMAIL Z	10
22.	ACE20EC023	MUHAMMED SHEHIN	10
23.	ACE20EC024	NITHISH B R	10
24.	ACE20EC025	SAFIYA S	9
25.	ACE20EC026	SHEENMON BS	9



Principal
ACE College of Engineering
Thiruvallam P.O.
Thiruvananthapuram-695 027

Signature



**Assessment Marks for Python Programming Academic Year:
2021-22 Date : 28/2/2022**

Sl. No.	Register Number	Candidate Name	Marks out of 10
26.	ACE28EC027	SHERIN SHA N	9
27.	ACE28EC028	SINDHU S	10
28.	ACE28EC029	SUHDHA SULFI	9
29.	ACE28EC031	TUSHAR KRISHNAN MORE	10
30.	ACE28EC032	VIPUL V V	10



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Value Added Course Summary Report with Course Outcome 2021-2022

Course Name : Python Programming(ECE21003)
Course Duration : 35 Hours
Year offered : 2nd Year ECE Students- 2021-2022
Course Instructors : Mr. Anshad P K
Assistant Professor/ ECE

Course outcome

The course is designed to provide Basic knowledge of Python. Python programming is intended for software engineers, system analysts, program managers and user support personnel who wish to learn the Python programming language. Learning Outcomes: Problem solving & programming capability.

Course type : Self framed value added course
Assessment Mode
Attendance : 35 Hrs
Number of Participants : 30
Scheme of exam : Physical Answer sheet mode
Date of exam : 28/2/2022

Snapshot of Python Programming Course




Course Coordinator




HOD



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Course Coordinator Report 2021-2022

Course Name : Python Programming (ECE21003)
Course Duration : 35 Hours
Year offered : 2nd Year ECE Students- 2021-2022
Course Coordinator : Mr. Afsal. S
Assistant Professor/ ECE
Course type : Self framed value added course

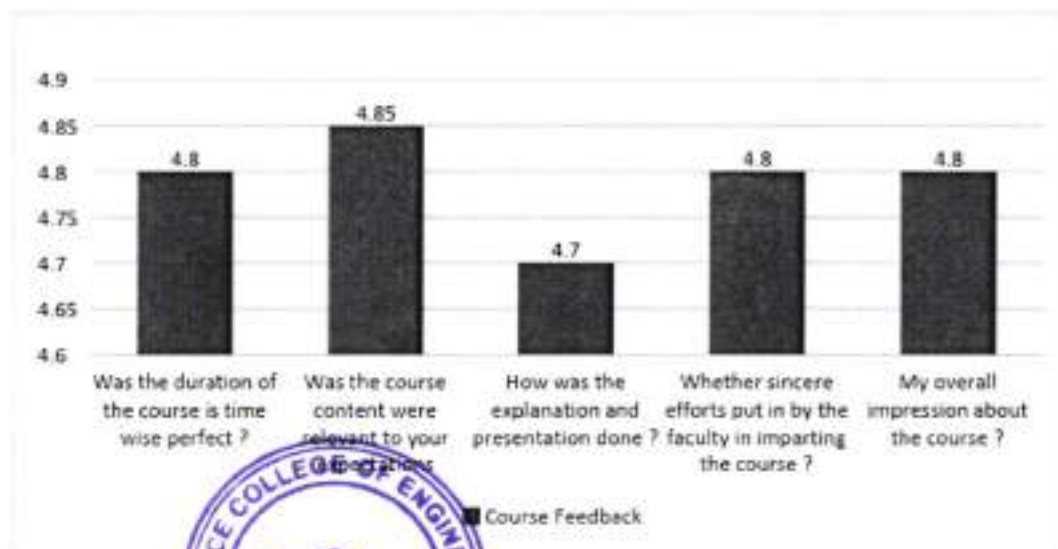
The Certificate program of 'Python Programming' was conducted for the 2nd year Electronics and Communication Engineering Students. The total period of 35Hrs has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled : 30
Number of students Appeared : 30
Scheme of exam : Physical Answer sheet mode
Date of exam : 28/2/2022
Number of students Passed : 30

Course Feedback :

The feedback was obtained from the participants after end the course and detailed analysis report are Listed below.



Course Coordinator



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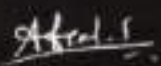
HOD

CERTIFICATE OF PYTHON PROGRAMMING

This certificate is proudly presented to:

VIPUL V V

for participating in the value added certificate program on Python Programming during 21/02/2022 to 25/02/2022 conducted by Department of Electronics and Communication Engineering at ACE college of engineering, TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD




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Thiruvallam P.O
Thiruvananthapuram-695 027

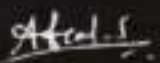
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CERTIFICATE OF PYTHON PROGRAMMING

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SUHDHA SULFI

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HOD





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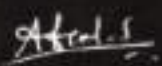


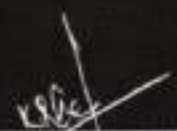
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THUSHAR KRISHNAN MORE

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Dr. K. RAFAEEQ AHMED
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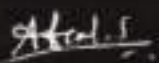


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SINDHU S

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CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD




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Thiruvananthapuram-695 027

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CERTIFICATE OF PYTHON PROGRAMMING

This certificate is proudly presented to:

SHERIN SHA N

for participating in the value added certificate program on Python Programming during 21/02/2022 to 25/02/2022 conducted by Department of Electronics and Communication Engineering at ACE college of engineering, TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD





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Education Board, Thiruvananthapuram - 695027 Kerala India
• +91 4712557777 / 83 / 87 • info@acecollege.edu.in • www.acecollege.edu.in



From
The Head of the Department,
Department of Electronics & Communication
Engineering,

ACE College of Engineering,
Trivandrum

To
The Principal
ACE College of Engineering,
Trivandrum

Respected Sir

Sub: Requisition to permit for conducting the Add-on Certification Course — Reg:-

We the department of Electronics and communication engineering planned to conduct 5 Days (35 Hrs.) training program on 'IOT using Arduino(ECE21001)' for Third Year ECE Students at ACE College of Engineering. The certification will be given by the department. The Course date and schedule are listed below for your kind approval.

Schedule Details

Date		Batch
From	To	
11/10/2021	15/10/2021	S5 ECE

Thanking You

ACE TVM,
4/10/2021



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Yours Truly



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Department of Electronics & Communication Engineering

Circular

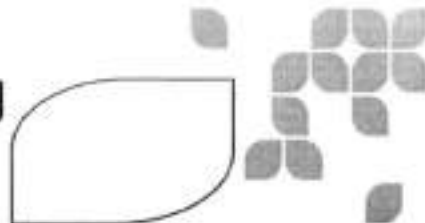
Date: 6/10/2021

We are extremely happy to inform that Electronics and communication engineering will be conducting 5 Days (35 Hrs.) training program on 'IOT using Arduino(ECE21001)' for Third Year ECE Students at DSP Lab, ACE College of Engineering from 11/10/2021 to 15/10/2021. students are requested to register & attend the program. Fullest cooperation is solicited for the successful conduct of the training

Sayed

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Course Contents for IOT using Arduino (ECE21001)

Academic Year: 2021-22

SYLLABUS:

1. Introduction to IOT

- Understanding IoT fundamentals (2hrs)
- IOT Architecture and protocols (2hrs)
- Various Platforms for IoT (2 hrs)
- Real time Examples of IoT (1 hr)
- Overview of IoT components and IoT Communication Technologies (2hrs)
- Challenges in IOT (2 hrs)

2. Arduino Simulation Environment

- Arduino Uno Architecture (2 hrs)
- Setup the IDE, Writing Arduino Software (1hr)
- Arduino Libraries (1 hr)
- Basics of Embedded C programming for Arduino (2hrs)
- Interfacing LED, push button (1 hr)

3. Sensor and Actuators with Arduino

- Overview of Sensors working (1hr)
- Analog and Digital Sensors (1 hr)
- Interfacing of Temperature, Humidity, Motion, Light sensors with Arduino (1hr)
- Interfacing of Actuators with Arduino. (2hrs)
- Interfacing of Relay Switch and Servo Motor with Arduino (2hrs)

4. Basic Networking with ESP8266 WiFi module

- Basics of Wireless Networking (1 hr)
- Introduction to ESP8266 Wi-Fi Module (1 hr)
- Various Wi-Fi library (1 hr)
- Web server- introduction, installation, configuration (1hr)
- Posting sensor(s) data to web server (1 hr)

5. Cloud Platforms for IOT

- Virtualization concepts and Cloud Architecture (2 hr)
- Cloud computing, benefits (1 hr)
- Cloud services -- SaaS, PaaS, IaaS (1 hr)



Prof. Dr. J. Jayaram
ACE College of Engineering
Thiruvallam P.O.
Thiruvananthapuram-6



Profile of Resource Person
Mr. Asif .S
(asif.shahkutty@acetvm.com)

Mr. Asif. S , Assistant Professor of Department of ECE, ACE College of Engineering, Thiruvallom with more than 5 years of teaching experience in different engineering colleges. He has several research papers in reputed national and international journals and conferences.

Areas of Excellence:

- IoT
- Arduino Programming
- Signal Processing
- Robotics & Automation
- Information Theory and Coding
- Control Systems
- Home Automation system



Course Coordinator



HOD



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Timetable for IOT using Arduino (ECE21001)

Academic Year: 2021-22

DAY/ PERIOD	1	2	3	4	LUNCH 12.35PM - 1.25PM	5	6	7
	8 :40 AM - 9: 35 AM	9:35 AM - 10: 30 AM	10 : 45 AM - 11: 40 AM	11 : 40 AM - 12 : 35 PM		1 :25 PM - 2 : 20 PM	2 : 20 PM - 3 :10 PM	3 : 20 PM - 4 : 10 PM
11/10/2021	Introduction to IOT (Understanding IOT fundamentals ,IOT Architecture and Protocols)					(Various Platforms for IOT, Real Time Examples of IOT)		
12/10/2021	(Overview of IoT components and IoT Communication Technologies ,Challenges in IOT)					Arduino Simulation Environment (Arduino Uno Architecture, Setup the IDE, Writing Arduino Software)		
13/10/2021	Arduino Libraries Basics of Embedded C programming for Arduino Interfacing LED, push button)					Sensor and Actuators with Arduino (Overview of Sensors working Analog and Digital Sensors Interfacing of Temperature, Humidity, Motion, Light sensors with Arduino)		
14/10/2021	(Interfacing of Actuators withArduino. Interfacing of Relay Switch and Servo Motor with Arduino)					Basic Networking with ESP8266 WiFi module (Basics of Wireless Networking Introduction to ESP8266 Wi-Fi Module Various Wi-Fi library)		
15/10/2021	(Web server- introduction, installation, configuration Posting sensor(s) data to web server Virtualization concepts and Cloud Architecture)				Cloud Platforms for IOT (Cloud computing, benefits Cloud services -- SaaS, PaaS, IaaS)		FEEDBACK	

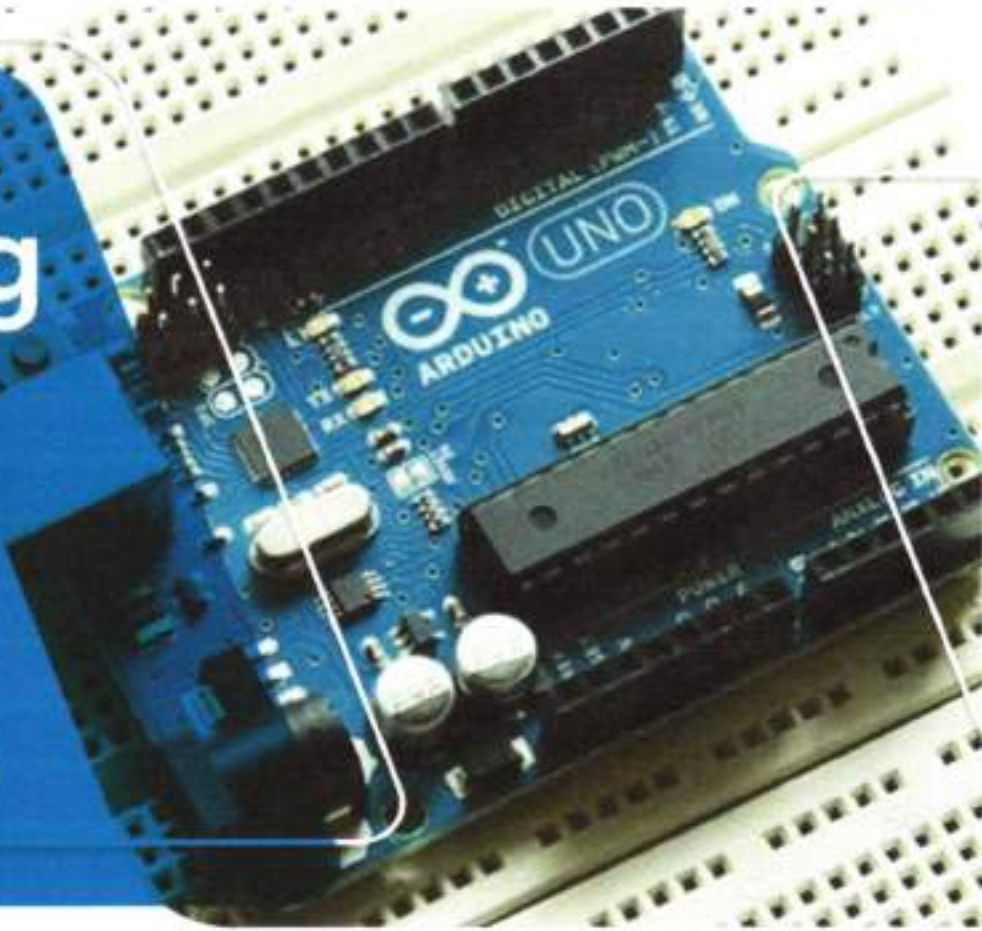


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IoT using Arduino

Department of
Electronics &
Communication
Engineering



Duration: 11/10/2021 – 15/10/2021

Resource Person
Mr. Asif S

Coordinator
(Assistant Professor)
Afsal. S



Convener (HOD)
Dr. K. Rafeeq Ahmed

Patron
Dr. Farrukh Sayeed
Principal



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Enrolled Students List for IOT using Arduino (ECE21001)

Academic Year: 2021-22

Date : 10/10/2021

SL No.	Register Number	Candidate Name	Signature
1.	ACE19EC001	ADARSH V S	Adarsh
2.	ACE19EC002	ADITHYA A M	Adithyas
3.	ACE19EC003	AKASH SHIBU	Ashish
4.	ACE19EC004	AKHIL A R	Akhil
5.	ACE19EC005	AKHILESH S	As
6.	ACE19EC006	ALWIN JOHN	Alwin
7.	ACE19EC007	ARJUN S	Arjun
8.	ACE19EC008	A S ASWIN	As
9.	ACE19EC009	ASWIN M L	Aswin
10.	ACE19EC010	FAYAS D	Fayas
11.	ACE19EC011	GAYATHRI S V	Gayathri
12.	ACE19EC012	NAFLA SAKHIR R	Nafila
13.	ACE19EC013	PARVATHY S S	Parvathy
14.	ACE19EC014	RESHMI S R	Resmi
15.	ACE19EC015	R GOKUL DHARMA	Gokul Dharma
16.	ACE19EC016	R SATHYANJAN	Sathyam
17.	ACE19EC017	RUKSANA T	Ruksana
18.	ACE19EC018	SAFA MANZOOR	Safa
19.	ACE19EC019	SHERNA LATHEEF	Sherina
20.	ACE19EC020	SOORAJ KUMAR JHA	Sooraj
21.	ACE19EC021	SURAJ HANMANT PATIL	Suraj
22.	ACE19EC022	SUSHMI RAJAN	Sushmi
23.	ACE19EC023	VAISHNAVI GEETHA	Vaishnavi
24.	ACE19EC024	V L DEVIKA	Devika
25.	LACE19EC025	RESHMA S	Reshma



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Thiruvallur - 601027



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Attendance Sheet for IOT using Arduino(ECE21001)

Academic Year: 2021-22

Course from 11/10/2021 to 15/10/2021

Sl. No.	Student Name	Kindly Sign Against your Name				
		11/10/2021	12/10/2021	13/10/2021	14/10/2021	15/10/2021
1.	ADARSH V S	Adarsh	Adarsh	Adarsh	Adarsh	Adarsh
2.	ADITHYA A M	Adithyas	Adithyas	Adithyas	Adithyas	Adithyas
3.	AKASH SHIBU	Ashibhu	Ashibhu	Ashibhu	Ashibhu	Ashibhu
4.	AKHIL A R	Akhil	Akhil	Akhil	Akhil	Akhil
5.	AKHILESH S	AS	AS	AS	AS	AS
6.	ALWIN JOHN	Ajel	Ajel	Ajel	Ajel	Ajel
7.	ARJUN S	Arjun	Arjun	Arjun	Arjun	Arjun
8.	A S ASWIN	AAS	AAS	AAS	AAS	AAS
9.	ASWIN M L	Aswin	Aswin	Aswin	Aswin	Aswin
10.	FAYAS D	A	Fayaz	Fayaz	A	Fayaz
11.	GAYATHRI S V	Gayathri	Gayathri	Gayathri	Gayathri	Gayathri
12.	NAFLA SAKHIR R	Nafila	Nafila	Nafila	Nafila	Nafila
13.	PARVATHY S S	Parvathy	Parvathy	Parvathy	Parvathy	Parvathy
14.	RESHMI S R	Resmi	Resmi	Resmi	Resmi	Resmi
15.	R GOKUL DHARMA	Gokul Dharma	Gokul Dharma	Gokul Dharma	Gokul Dharma	Gokul Dharma
16.	R SATHYANJAN	R Sathyanjan	R Sathyanjan	R Sathyanjan	R Sathyanjan	R Sathyanjan
17.	RUKSANA T	Rukhsana	Rukhsana	Rukhsana	Rukhsana	Rukhsana
18.	SAFA MANZDOR	Safa	Safa	Safa	Safa	Safa
19.	SHERNA LATHEEF	A	A	Sheena	Sheena	Sheena
20.	SOORAJ KUMAR JHA	Sooraj	Sooraj	Sooraj	Sooraj	Sooraj
21.	SURAJ HANMANT PATIL	Suraj	Suraj	Suraj	Suraj	Suraj
22.	SUSHMI RAJAN	Sushmi	Sushmi	Sushmi	Sushmi	Sushmi
23.	VAISHNAVI GEETHA	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi	Vaishnavi
24.	V L DEVIKA	Devika	Devika	Devika	Devika	Devika
25.	RESHMA S	Reshma	Reshma	Reshma	Reshma	Reshma



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Completed Students List for IOT using Arduino (ECE21001)

Academic Year: 2021-22

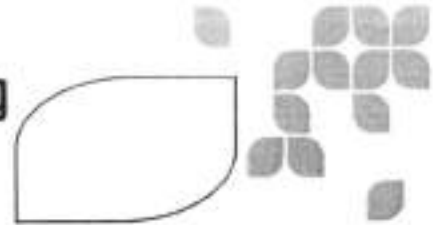
Date : 10/10/2021

Sl. No.	Register Number	Candidate Name	Completed
1.	ACE19EC001	ADARSH V S	✓
2.	ACE19EC002	ADITHYA A M	✓
3.	ACE19EC003	AKASH SHIBU	✓
4.	ACE19EC004	AKHIL A R	✓
5.	ACE19EC005	AKHILESH S	✓
6.	ACE19EC006	ALWIN JOHN	✓
7.	ACE19EC007	ARJUN S	✓
8.	ACE19EC008	A S ASWIN	✓
9.	ACE19EC009	ASWIN M L	✓
10.	ACE19EC010	FAYAS D	✓
11.	ACE19EC011	GAYATHRI S V	✓
12.	ACE19EC012	NAFLA SAKHIR R	✓
13.	ACE19EC013	PARVATHY S S	✓
14.	ACE19EC014	RESHMI S R	✓
15.	ACE19EC015	R GOKUL DHARMA	✓
16.	ACE19EC016	R SATHYANJAN	✓
17.	ACE19EC017	RUKSANA T	✓
18.	ACE19EC018	SAFA MANZOOR	✓
19.	ACE19EC019	SHERNA LATHEEF	✓
20.	ACE19EC020	SOORAJ KUMAR JHA	✓
21.	ACE19EC021	SURAJ HANMANT PATIL	✓
22.	ACE19EC022	SUSHMI RAJAN	✓
23.	ACE19EC023	VAISHNAVI GEETHA	✓
24.	ACE19EC024	V L DEVIKA	✓
25.	LACE19EC025	RESHMA.S	✓



Signature

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Assessment Questions for IOT using Arduino (ECE21001)

Academic Year: 2021-22

This set of IOT Multiple Choice Questions (MCQs) focuses on "Arduino".

1. How many types of arduinos do we have?
 - a) 5
 - b) 6
 - c) 8
 - d) 6
2. What is the microcontroller used in Arduino UNO?
 - a) ATmega328p
 - b) ATmega2560
 - c) ATmega32114
 - d) AT91SAM3x8E
3. What does p refer to in ATmega328p?
 - a) Production
 - b) Pico-Power
 - c) Power-Pico
 - d) Programmable on chip
4. Arduino shields are also called as _____.
 - a) Extra peripherals
 - b) Add on modules
 - c) Connectivity modules
 - d) Another Arduinos
5. What is the default bootloader of the Arduino UNO?
 - a) Optiboot bootloader
 - b) AIR-boot
 - c) Bare box
 - d) GAG
6. Does the level shifter converts the voltage levels between RS-232 and transistor-transistor logic.
 - a) True



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7. Which is the software or a programming language used for controlling of Arduino?

- a) Assembly Language
- b) C Languages
- c) JAVA
- d) Any Language

8. Do Arduino provides IDE Environment?

- a) True
- b) False

9. A program written with the IDE for Arduino is called _____

- a) IDE source
- b) Sketch
- c) Cryptography
- d) Source code

10. Which board is first to use microcontroller within build USB?

- a) LilyPad
- b) UNO
- c) RedBoard
- d) Leonardo

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Assessment Questions for IOT using Arduino (ECE21001)

Academic Year: 2021-22

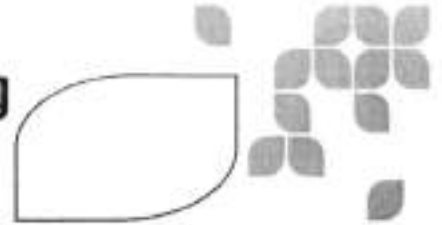
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 - a) True ✓



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Assessment Questions for IOT using Arduino (ECE21001)

9

Academic Year: 2021-22

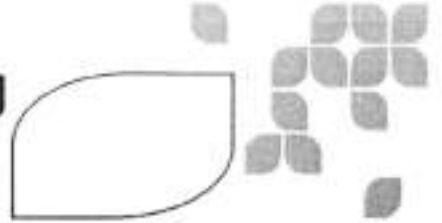
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Akshil. A.R



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Assessment Questions for IOT using Arduino (ECE21001)

Academic Year: 2021-22

10

This set of IOT Multiple Choice Questions (MCQs) focuses on "Arduino".

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 - d) GAG
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 - a) True ✓



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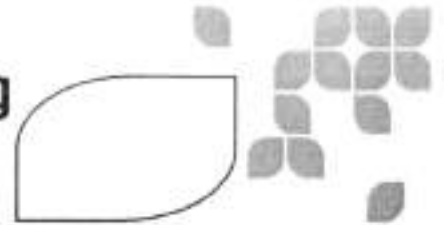
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Assessment Questions for IOT using Arduino (ECE21001)

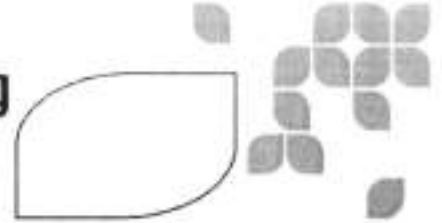
Academic Year: 2021-22

This set of IOT Multiple Choice Questions (MCQs) focuses on "Arduino".

- 10
- How many types of arduinos do we have?
a) 5
b) 6
☒ c) 8
d) 6
 - What is the microcontroller used in Arduino UNO?
☒ a) ATmega328p
b) ATmega2560
c) ATmega32114
d) AT91SAM3x8E
 - What does p refer to in ATmega328p?
a) Production
☒ b) Pico-Power
c) Power-Pico
d) Programmable on chip
 - Arduino shields are also called as _____.
☒ a) Extra peripherals
b) Add on modules
c) Connectivity modules
d) Another Arduinos
 - What is the default bootloader of the Arduino UNO?
a) Optiboot bootloader
b) AIR-boot
☒ c) Bare box
d) GAG
 - Does the level shifter converts the voltage levels between RS-232 and transistor-transistor logic.
☒ a) True



Gayathri
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7. Which is the software or a programming language used for controlling of Arduino?

- a) Assembly Language
- b) C Languages
- c) ☒ JAVA
- d) Any Language

8. Do Arduino provides IDE Environment?

- a) ☒ True
- b) False

9. A program written with the IDE for Arduino is called _____

- a) IDE source
- b) ☒ Sketch
- c) Cryptography
- d) Source code

10. Which board is first to use microcontroller within build USB?

- a) LilyPad
- b) UNO
- c) ☒ RedBoard
- d) Leonardo



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Assessment Questions for IOT using Arduino (ECE21001)

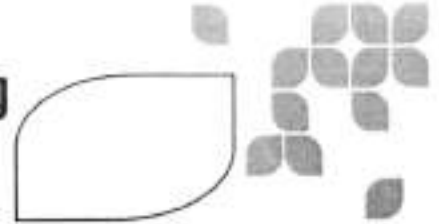
Academic Year: 2021-22

This set of IOT Multiple Choice Questions (MCQs) focuses on "Arduino".

1. How many types of arduinos do we have?
- a) 5
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 - c) 8 ✓
 - d) 6
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 - b) Add on modules ✓
 - c) Connectivity modules
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 - b) AIR-boot
 - c) Bare box ✓
 - d) GAG
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- a) True ✓



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7. Which is the software or a programming language used for controlling of Arduino?

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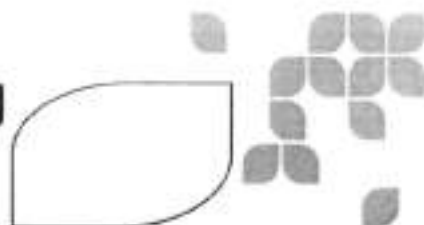
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Assessment marks for IOT using Arduino (ECE21001)

Academic Year: 2021-22

Date : 22/10/2021

Sl. No.	Register Number	Candidate Name	Marks out of 10
1.	ACE19EC001	ADARSH V S	9
2.	ACE19EC002	ADITHYA A M	9
3.	ACE19EC003	AKASH SHIBU	8
4.	ACE19EC004	AKHIL A R	10
5.	ACE19EC005	AKHILESH S	10
6.	ACE19EC006	ALWIN JOHN	10
7.	ACE19EC007	ARJUN S	10
8.	ACE19EC008	A S ASWIN	8
9.	ACE19EC009	ASWIN M L	9
10.	ACE19EC010	FAYAS D	9
11.	ACE19EC011	GAYATHRI S V	10
12.	ACE19EC012	NAFLA SAKHIR R	9
13.	ACE19EC013	PARVATHY S S	10
14.	ACE19EC014	RESHMI S R	10
15.	ACE19EC015	R GOKUL DHARMA	10
16.	ACE19EC016	R SATHYANJAN	9
17.	ACE19EC017	RUKSANA T	10
18.	ACE19EC018	SAFA MANZOOR	10
19.	ACE19EC019	SHERNA LATHEEF	9
20.	ACE19EC020	SOORAJ KUMAR JHA	10
21.	ACE19EC021	SURAJ HANMANT PATIL	10
22.	ACE19EC022	SUSHMI RAJAN	9
23.	ACE19EC023	VAISHNAVI GEETHA	10
24.	ACE19EC024	V L DEVIKA	10
25.	LACE19EC025	RESHMA S	10



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Value Added Course Summary Report with Course outcome 2021-2022

Course Name : IoT using Arduino(ECE21001)
Course Duration : 35 Hours
Year offered : 3rd Year ECE Students- 2021-2022
Course Instructors : Mr. Asif .S
Assistant Professor/ ECE

Course outcome

The students would be able understand the pros of IoT in modern day life, shall learn programming in microcontroller and get hands on experience in designing various IoT applications.

Course type : Self framed value added course

Assessment Mode

Attendance : 35 Hrs
Number of Participants : 25
Scheme of exam : Physical Answer sheet mode
Date of exam : 18/10/2021

SNAPSHOT OF COURSE IoT USING ARDUINO




Course Coordinator


HOD

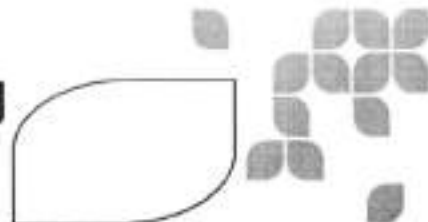

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Course Coordinator Report 2021-2022

Course Name : IoT using Arduino(ECE21001)
Course Duration : 35 Hours
Year offered : 3rd Year ECE Students- 2021-2022
Course Coordinator : Mr. Afsal. S
Assistant Professor/ ECE
Course type : Self framed value added course

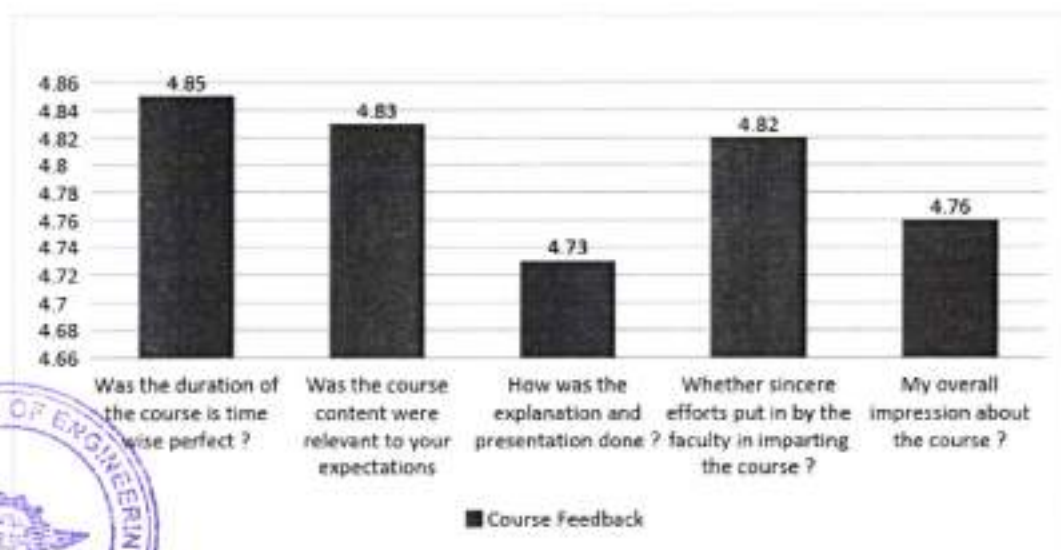
The Certificate program of 'IoT using Arduino' was conducted for the 3rd year Electronics and Communication Engineering Students. The total period of 35Hrs has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled : 25
Number of students Appeared : 25
Scheme of exam : Physical Answer sheet mode
Date of exam : 18/10/2021
Number of students Passed : 25

Course Feedback :

The feedback was obtained from the participants after end the course and detailed analysis report are Listed below.



Course Coordinator

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[Signature]
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Certificate

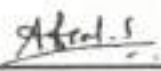
of IoT using Arduino

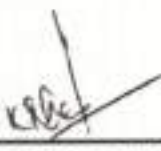


This is awarded to

ADARSH VS

for participating in the value added certificate program on IoT using Arduino during 11/10/2021 to 15/10/2021 conducted by Department of Electronics and Communication Engineering at ACE college of engineering, TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD



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Certificate

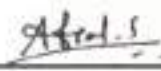
of IoT using Arduino



This is awarded to

ADITHYA A M

for participating in the value added certificate program on IoT using Arduino during 11/10/2021 to 15/10/2021 conducted by Department of Electronics and Communication Engineering at ACE college of engineering,TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAQ AHMED
HOD


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Certificate

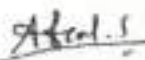
of IoT using Arduino



This is awarded to

AKASH SHIBU

for participating in the value added certificate program on IoT using Arduino during 11/10/2021 to 15/10/2021 conducted by Department of Electronics and Communication Engineering at ACE college of engineering,TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD



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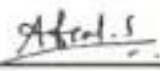
of IoT using Arduino



This is awarded to

AKHIL A R

for participating in the value added certificate program on IoT using Arduino during 11/10/2021 to 15/10/2021 conducted by Department of Electronics and Communication Engineering at ACE college of engineering, TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD



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Certificate

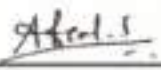
of IoT using Arduino



This is awarded to

AKHILESH S

for participating in the value added certificate program on IoT using Arduino during 11/10/2021 to 15/10/2021 conducted by Department of Electronics and Communication Engineering at ACE college of engineering,TVM


Mr. Afsal S
CO-ORDINATOR


Dr. K. RAFAEEQ AHMED
HOD



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Thiruvananthapuram - 695 027
Phone: 9447111777 / 9447111778 Email: info@ace.edu.in



From
The Head of the Department,
Department of Electronics & Communication
Engineering,
ACE College of Engineering,
Trivandrum

To
The Principal
ACE College of Engineering,
Trivandrum

Respected Sir

Sub: Requisition to permit for conducting the Add-on Certification Course — Reg:-

We the department of Electronics and communication engineering planned to conduct 5 Days (35 Hrs.) training program on 'Data Science(ECE21002)' for Fourth Year ECE Students at ACE College of Engineering. The certification will be given by the department. The Course date and schedule are listed below for your kind approval.

Schedule Details

Date		Batch
From	To	
14/3/2022 2	18/3/2022	S8 ECE

Thanking You

ACE TVM,
7/3/2022

Yours Truly

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ACE College of Engineering
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ACE College of Engineering

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As per NOTT-2011 and UGC Regulations, Engineering Thiruvananthapuram
Thiruvananthapuram, 695027 Kerala India
☎ +91 4777117777 / 87 197 ✉ info@ace.edu.in www.ace.edu.in



Department of Electronics & Communication Engineering

Circular

Date: 9/3/2022

We are extremely happy to inform that Electronics and communication engineering will be conducting 5 Days (35 Hrs.) training program on 'Data Science[ECE21002]' for Third Year ECE Students at MC Lab, ACE College of Engineering from 14/3/2022 to 18/3/2022. students are requested to register & attend the program. Fullest cooperation is solicited for the successful conduct of the training

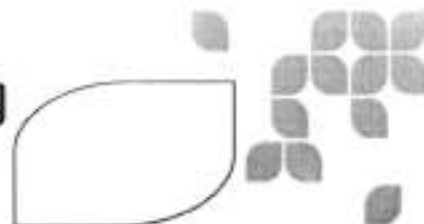

Coordinator


HOD





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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Course Contents for Data Science(ECE21002)

Academic Year: 2021-22

SYLLABUS:

1. Introduction to Data science & Machine Learning Algorithms

Definition of data science (1 hr)
importance (2hrs)
basic applications (1 hr)
Using mathematical models or algorithms to recognize patterns (1hr)
classification (1 hr)
predictions about a dataset. (1 hr)

2. Artificial Intelligence & Data Visualization

- Creation of algorithms to create a machine capable of problem-solving capabilities like a human.(4 hrs)
- Data representation in form of a chart, diagram, plot, etc (3 hrs)

3. Data Analysis & Coding (Python, SQL, Java)

- Formatting or modeling data to discover insights using algorithms. (4 hrs)
- Basic coding to organize unstructured data. (3hrs)

4. Optimization Techniques & Statistics

- Optimization of software that is used in data extraction to gain the maximum output with limited resources. (4 hrs)
- Statistics is used to draw insights from data and apply appropriate mathematical models to variables. (3hrs)

5. Big Data & Predictive Analysis

- Managing enormous data sets to make extraction and data analysis easier.(4 hrs)
- Use of data, algorithms, and models to predict outcomes based on historical data.(2 hrs)



Signature
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Profile of Resource Person

Ms. Hima Vijayan V P
(hima.vijayan@acetvm.com)

Ms. Hima Vijayan V P , Assistant Professor of Department of ECE, ACE College of Engineering, Thiruvallom with more than 10 years of teaching experience in different engineering colleges. she has more than 10 research papers in reputed national and international journals and conferences. She is currently Pursuing her PhD under KTU.

Areas of Excellence:

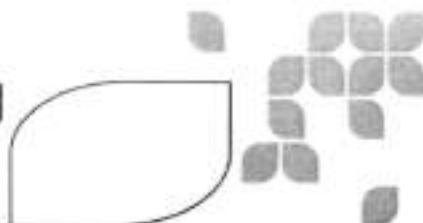
- Machine learning
- Deep learning
- Natural Language Processing
- Computer Vision
- Python Programming
- Artificial Intelligence


Course Coordinator


HoB


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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Timetable for Data Science (ECE21002)
Academic Year: 2021-22

DAY/ PERIOD	1	2	3	4		5	6	7
	8 :40 AM – 9: 35 AM	9:35 AM – 10: 30 AM	10 : 45 AM – 11: 40 AM	11 : 40 AM – 12 : 35 PM		1 :25 PM – 2 : 20 PM	2 : 20 PM – 3 :10 PM	3 : 20 PM – 4 : 10 PM
14/3/2022	Introduction to Data science & Machine Learning Algorithms (Definition of data science importance basic applications)				LUNCH 12.35PM - 1.25PM	Using mathematical models or algorithms to recognize patterns classification predictions about a dataset.		
15/3/2022	Artificial Intelligence & Data Visualization Creation of algorithms to create a machine capable of problem-solving capabilities like a human.					Data representation in form of a chart, diagram, plot, etc		
16/3/2022	Data Analysis & Coding (Python, SQL, Java) Formatting or modeling data to discover insights using algorithms.					Basic coding to organize unstructured data.		
17/3/2022	Optimization Techniques & Statistics Optimization of software that is used in data extraction to gain the maximum output with limited resources.					Statistics is used to draw insights from data and apply appropriate mathematical models to variables.		
18/3/2022	Big Data & Predictive Analysis Managing enormous data sets to make extraction and data analysis easier.					Use of data, algorithms, and models to predict outcomes based on historical data,		FEEDBACK

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[Signature]



Data Science

Department of
Electronics &
Communication
Engineering

Duration: 14/3/2022 – 18/3/2022

Resource Person
Ms. Hima Vijayan V P

Convener (HOD)
Dr. K. Rafeeq Ahmed

Coordinator
(Assistant Professor)
Afsal. S



Patron
Dr. Farrukh Sayeed
Principal



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Enrolled Students List for Data Science(ECE21002)

Academic Year: 2021-22

Date : 13/3/2022

Sl. No.	Register Number	Candidate Name	Signature
1.	ACE18EC001	ABHIJEETH J NAIR	Abhijeeth
2.	ACE18EC002	ABHIJITH.B.R	Abhijith
3.	ACE18EC003	ABHIRAM.A	Abhiram
4.	ACE18EC004	AKHIL.A.R	Akhil
5.	ACE18EC006	AMINA S SIRAJ	Amina
6.	ACE18EC007	ANANDHU A S	Anandhu
7.	ACE18EC008	APARNA S NAIR	Aparna
8.	ACE18EC009	ARUNIMA M. S	Arunima
9.	ACE18EC010	ARUN VIJAY	Arun
10.	ACE18EC011	ASMINA NAZAR	Asminia
11.	ACE18EC012	B. DEEKSHITHA BAI	Deekshitha
12.	ACE18EC013	DEVIKA THANKACHY G. S	Devika
13.	ACE18EC014	EMAD MOHAMMED SIDDIK	Emad
14.	ACE18EC016	KRISHNAPRIYA S. A	Krishna Priya
15.	ACE18EC017	M. MOHAMMED SWALIH	Mohammed
16.	ACE18EC018	MOHAMED ASIF	Asif
17.	ACE18EC019	M. RUBAN	Ruban
18.	ACE18EC020	NADIYA NOUSHAD N	Nadiya
19.	ACE18EC021	NAJMA A. S	Najma
20.	ACE18EC022	NITHIN N. S	Nithin
21.	ACE18EC023	SARATH CHANDRAN	Sarath
22.	ACE18EC024	SHABANA AHAMMED S	Shabana
23.	ACE18EC025	SHAHAR BANU H	Shahar
24.	ACE18EC027	SHIBIN DILEEP	Shibin



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Enrolled Students List for Data Science

Academic Year: 2021-22

Date : 13/3/2022

Sl. No.	Register Number	Candidate Name
25.	ACE18EC028	SIJITH RAJ S. R. <i>Sijith</i>
26.	ACE18EC029	SOORAJ R. <i>Sooraj</i>
27.	ACE18EC030	SOUPARNIKA PANICKER S. D. <i>Souparnika</i>
28.	ACE18EC031	VARSHA S. <i>Varsha</i>
29.	ACE18EC032	VINOBA V. M. <i>Vinoba</i>
30.	LACE18EC033	NEETHU P B. <i>Neethu</i>
31.	LACE18EC034	SAURAV B NAIR. <i>Saurav</i>
32.	ACE17EC012	KATURI SEKIL. <i>Katuri</i>



Sayed

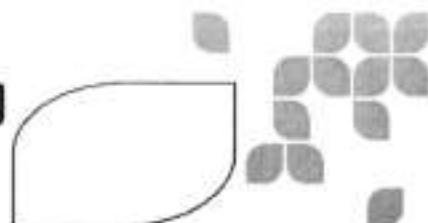
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Attendance Sheet for Data Science (ECE21002)

Academic Year: 2021-22

Course from 14/3/2022 to 18/3/2022

Sl. No.	Student Name	Kindly Sign Against your Name				
		14/3/2022	15/3/2022	16/3/2022	17/3/2022	18/3/2022
1.	ABHIJEETH I NAIR	Abhijeet	Abhijeet	Abhijeet	Abhijeet	Abhijeet
2.	ABHIJITH B.R	Abhijith	Abhijith	Abhijith	Abhijith	Abhijith
3.	ABHIRAM A	Abhiram	Abhiram	Abhiram	Abhiram	Abhiram
4.	AKHILA R	Akhil	Akhil	Akhil	Akhil	Akhil
5.	AMINA S SRAJ	Amin	Amin	Amin	Amin	Amin
6.	ANANDHU A S	Ans	Ans	Ans	A	Ans
7.	APARNA S NAIR	Aparna	Aparna	Aparna	Aparna	Aparna
8.	ARUNIMA M S	Arunima	Arunima	Arunima	Arunima	Arunima
9.	ARUN VIJAY	Arun	Arun	Arun	Arun	Arun
10.	ASMINA NAZAR	Asmin	Asmin	Asmin	Asmin	Asmin
11.	B. DEEKSHITHA BAI	Deekshitha	Deekshitha	Deekshitha	Deekshitha	Deekshitha
12.	DEVIKA THANKACHY G. S	Devika	Devika	Devika	Devika	Devika
13.	EMAD MOHAMMED SIDDIK	Emad	Emad	Emad	Emad	Emad
14.	KRISHNAPRIYA S. A	Krishnapriya	Krishnapriya	Krishnapriya	Krishnapriya	Krishnapriya
15.	M. MOHAMMED SWALIH	A	A	Moham	Moham	Moham
16.	MOHAMED ASIF	Asif	Asif	Asif	Asif	Asif
17.	M. RUBAN	Ruban	Ruban	Ruban	Ruban	Ruban
18.	NADIYA NOUSHAD N	Nadeya	Nadeya	Nadeya	Nadeya	Nadeya
19.	NAJMA A. S	Najma	Najma	Najma	Najma	Najma
20.	NITHIN N. S	Nathya	Nathya	Nathya	Nathya	Nathya
21.	SARATH CHANDRAN	Sarath	Sarath	Sarath	Sarath	Sarath
22.	SHABANA AHAMMED S	Shabana	Shabana	Shabana	Shabana	Shabana
23.	SHAHAR BANU H	Shahar	Shahar	Shahar	Shahar	Shahar
24.	SHIBIN DILEEP	Shibin	A	A	Shibin	Shibin
25.	SIJITH RAI S. R	Sijith	Sijith	Sijith	Sijith	Sijith



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Attendance Sheet for Data Science

Academic Year: 2021-22

Course from 14/3/2022 to 18/3/2022

Sl. No.	Student Name	Kindly Sign Against your Name				
		14/3/2022	15/3/2022	16/3/2022	17/3/2022	18/3/2022
26.	SOORAJ R	<i>a</i>	<i>Sooraj</i>	<i>Sooraj</i>	<i>Sooraj</i>	<i>Sooraj</i>
27.	SOUFARNIKA PANICKER S.D	<i>Souf</i>	<i>Souf</i>	<i>a</i>	<i>Souf</i>	<i>Souf</i>
28.	VARSHA S	<i>a</i>	<i>Var</i>	<i>Var</i>	<i>Var</i>	<i>Var</i>
29.	VINOBA V. M	<i>V</i>	<i>V</i>	<i>V</i>	<i>V</i>	<i>V</i>
30.	NEETHU P B	<i>N</i>	<i>a</i>	<i>N</i>	<i>N</i>	<i>N</i>
31.	SAURAV B NAIR	<i>Saurav</i>	<i>Saurav</i>	<i>Saurav</i>	<i>Saurav</i>	<i>a</i>
32.	KATURI SEKIL	<i>a</i>	<i>Katuri</i>	<i>Katuri</i>	<i>Katuri</i>	<i>Katuri</i>



Sayed

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Thiruvananthapuram-695027



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Completed Students List for Data Science(ECE21002)

Academic Year: 2021-22

Date : 13/3/2022

Sl. No.	Register Number	Candidate Name	Completed
1.	ACE18EC001	ABHIJITH I NAIR	✓
2.	ACE18EC002	ABHIJITH.B.R	✓
3.	ACE18EC003	ABHIRAM.A	✓
4.	ACE18EC004	AKHILA.R	✓
5.	ACE18EC006	AMINA S SIRAJ	✓
6.	ACE18EC007	ANANDHU A S	✓
7.	ACE18EC008	APARNA S NAIR	✓
8.	ACE18EC009	ARUNIMA M. S	✓
9.	ACE18EC010	ARUN VIJAY	✓
10.	ACE18EC011	ASMINA NAZAR	✓
11.	ACE18EC012	B. DEEKSHITHA BAI	✓
12.	ACE18EC013	DEVIKA THANKACHY G. S	✓
13.	ACE18EC014	EMAD MOHAMMED SIDDIK	✓
14.	ACE18EC016	KRISHNAPRIYA S.A	✓
15.	ACE18EC017	M. MOHAMMED SWALIH	✓
16.	ACE18EC018	MOHAMED ASIF	✓
17.	ACE18EC019	M. RUBAN	✓
18.	ACE18EC020	NADIYA NOUSHAD N	✓
19.	ACE18EC021	NAJMA A. S	✓
20.	ACE18EC022	NITHIN N. S	✓
21.	ACE18EC023	SARATH CHANDRAN	✓
22.	ACE18EC024	SHABANA AHAMMED S	✓
23.	ACE18EC025	SHAHAR BANU H	✓
24.	ACE18EC027	SHIBIN DILEEP	✓



Signature
Principal
ACE College of Engineering
Thiruvananthapuram - 695027



Completed Students List for Data Science

Academic Year: 2021-22

Date : 13/3/2022

Sl. No.	Register Number	Candidate Name	completed
25.	ACE18EC028	SIJITH RAJ S. R	√
26.	ACE18EC029	SOORAJ R	√
27.	ACE18EC030	SOUPARNIKA PANICKER S.D	√
28.	ACE18EC031	VARSHA S	√
29.	ACE18EC032	VINOBA V. M	√
30.	LACE18EC033	NEETHU P. B	√
31.	LACE18EC034	SAURAV B NAIR	√
32.	ACE17EC012	KATURI SEKIL	√



Signature

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Assessment Questions for Data Science (ECE21002)
Academic Year: 2021-22

This set of IOT Multiple Choice Questions focuses on Data Science

1. Data science is the process of diverse set of data through ?

- A. Organizing data
- B. Processing data
- C. Analysing data
- D. All of the above

2. Point out the correct statement.

- A. Raw data is original source of data
- B. Preprocessed data is original source of data
- C. Raw data is the data obtained after processing steps
- D. None of the above

3. How do we perform Bayesian classification when some features are missing?

- A. We integrate the posteriors probabilities over the missing features
- B. We ignore the missing features
- C. We assuming the missing values as the mean of all values
- D. Drop the features completely

4. The modern conception of data science as an independent discipline is sometimes attributed to?

- A. John McCarthy
- B. Arthur Samuel
- C. William S.
- D. Dennis Ritchie

5. _____ graph displays information as a series of data points connected by straight line segments.

- A. Bar
- B. Scatter
- C. Histogram
- D. Line



Signature

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Tiruvallur P.O.
Tiruvallur - 602 027



6. Data fishing is sometimes referred to as

- A. Data bagging
- B. Data dredging
- C. Data merging
- D. None of the mentioned

7. Which is one of the significant data science skills?

- A. Statistics
- B. Data Visualization
- C. Machine Learning
- D. All of the above

8. A method used to make vector of repeated values?

- A. read()
- B. data()
- C. rep()
- D. view()

9. Which of the following step is performed by the data scientist after acquiring the data?

- A. Data Replication
- B. Data Integration
- C. Data Cleansing
- D. All of the Mentioned



10. K- nearest neighbors algorithm is based on _____ learning

- A. Supervised
- B. Unsupervised
- C. Association
- D. Correlation

Handwritten signature in green ink.

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Tiruvananthapuram-695 027



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Assessment Questions for Data Science (ECE21002)

Academic Year: 2021-22

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Saritha

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Assessment Questions for Data Science (ECE21002)

Academic Year: 2021-22

10

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Thiruvananthapuram-695 027



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10

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Assessment Questions for Data Science (ECE21002)

Academic Year: 2021-22

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING
Assessment Questions for Data Science (ECE21002)
Academic Year: 2021-22

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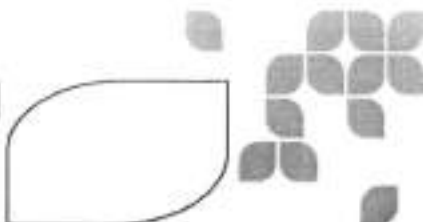

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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

Assessment Marks for Data Science(ECE21002)

Academic Year: 2021-22

Date : 22/3/2022

Sl. No.	Register Number	Candidate Name	Marks out of 10
1.	ACE18EC001	ABHISHEETH J NAIR	10
2.	ACE18EC002	ABHIRAM R.R	10
3.	ACE18EC003	ABHIRAM A	9
4.	ACE18EC004	AKHIL A.R	10
5.	ACE18EC006	AMINA S SIRAJ	10
6.	ACE18EC007	ANANDHU A S	9
7.	ACE18EC008	APARNA S NAIR	10
8.	ACE18EC009	ARUNIMA M. S	10
9.	ACE18EC010	ARUN VIJAY	10
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11.	ACE18EC012	B. DEEKSHITHA BAI	10
12.	ACE18EC013	DEVIKA THANKACHY G. S	10
13.	ACE18EC014	EMAD MOHAMMED SIDDIK	9
14.	ACE18EC016	KRISHNAPRIYA S. A.	10
15.	ACE18EC017	M. MOHAMMED SWALIH	10
16.	ACE18EC018	MORAMED ASIF	10
17.	ACE18EC019	M. RUBAN	9
18.	ACE18EC020	NADIYA NOUSHAD N	10
19.	ACE18EC021	NAJMA A. S	10
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22.	ACE18EC024	SHABANA AHAMMED S	10
23.	ACE18EC025	SHAHAR BANU H	10
24.	ACE18EC027	SHIBIN DILEEP	9
25.	ACE18EC028	SUJITH RAJ S. R	10



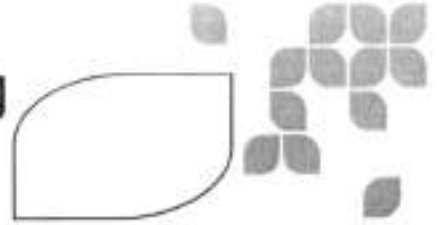
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Signature



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Assessment Marks for Data Science Academic Year: 2021-22

Date : 22/3/2022

Sl. No.	Register Number	Candidate Name	Marks out of 10
26.	ACE18EC029	SOORAJ R	10
27.	ACE18EC030	SOUBARNIKA PANICKER S.D	10
28.	ACE18EC031	VARSHA S	9
29.	ACE18EC032	VINORA V.M	10
30.	ACE18EC033	NERTHU P.B	10
31.	ACE18EC034	SAURAV R NAIR	9
32.	ACE17EC012	KATURI SEKIL	10



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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Value Added Course Summary Report with Course Outcome 2021-2022

Course Name : Data Science(ECE21002)
Course Duration : 35 Hours
Year offered : 4th Year ECE Students- 2021-2022
Course Instructors : Ms. Hima Vijayan V P
Assistant Professor/ ECE

Course outcome

Students would demonstrate proficiency with statistical analysis of data and develop the ability to build and assess data-based models. Students would execute statistical analysis with professional statistical software.

Course type : Self framed value added course
Assessment Mode
Attendance : 35 Hrs
Number of Participants : 32
Scheme of exam : Physical Answer sheet mode
Date of exam : 21/3/2022

SNAPSHOT OF DATA SCIENCE COURSE

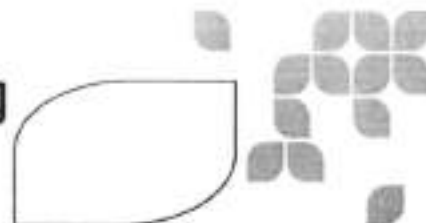



Course Coordinator






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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING Course Coordinator Report 2021-2022

Course Name : Data Science(ECE21002)
Course Duration : 35 Hours
Year offered : 4th Year ECE Students- 2021-2022
Course Coordinator : Mr. Afsal. S
Assistant Professor/ ECE
Course type : Self framed value added course

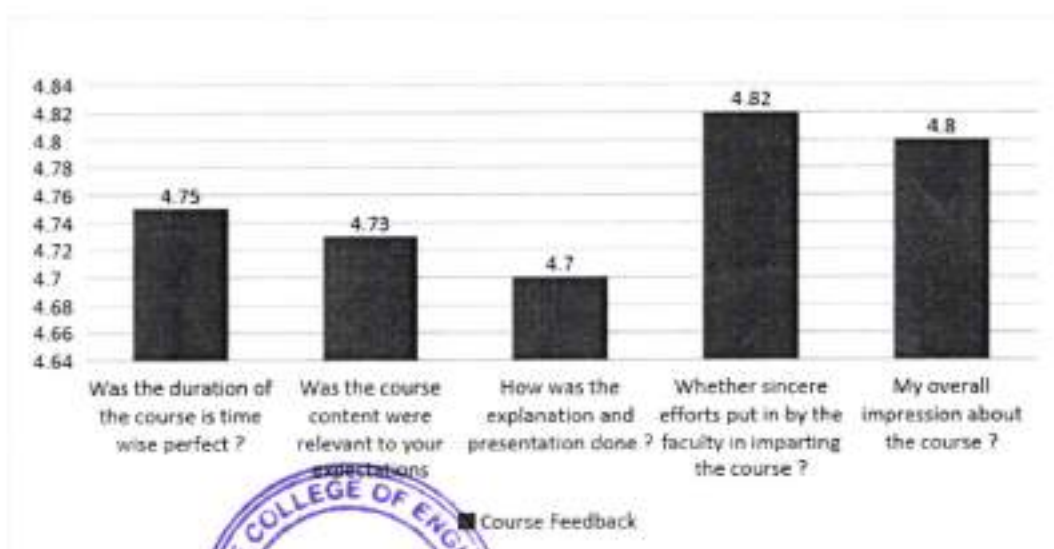
The Certificate program of 'Data Science' was conducted for the 4th year Electronics and Communication Engineering Students. The total period of 35Hrs has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled : 32
Number of students Appeared : 32
Scheme of exam : Physical Answer sheet mode
Date of exam : 21/3/2022
Number of students Passed : 32

Course Feedback :

The feedback was obtained from the participants after end the course and detailed analysis report are Listed below.




Course Coordinator




Principal
ACE College of Engineering
Thiruvananthapuram-695 027

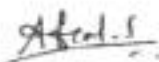

HOD

CERTIFICATE OF DATA SCIENCE

This is awarded to

ABHIJITH.B.R

for participating in the value added certificate program on
Data Science during 14/3/2022 to 18/3/2022 conducted by
Department of Electronics and Communication Engineering
at ACE college of engineering,TVM



Mr.Afsal S
CO-ORDINATOR



Dr.Jayarenjini N
HOD



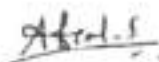
PRINCIPAL
ACE College of Engineering
Thiruvallam P.O
Thiruvananthapuram-695 027

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ABHIRAM.A

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Mr.Afsal S
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HOD



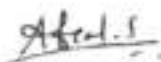
PRINCIPAL
ACE College of Engineering
Thiruvallam P.O
Thiruvananthapuram-695 027

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Mr.Afsal S
CO-ORDINATOR



Dr.Jayarenjini N
HOD



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Thiruvananthapuram-695 027

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Afsal S

Mr.Afsal S
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Dr.Jayarejini N
HOD



Dr. Jayarejini N

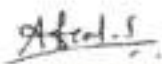
PRINCIPAL
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Dr.Jayarejini N
HOD




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Thiruvananthapuram P.O.
Thiruvananthapuram-895 027



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From
The Head of the Department,
Department of Mechanical Engineering,
ACE College of Engineering, Trivandrum

To
The Principal
ACE College of Engineering,
Trivandrum

Respected Sir

Sub: Requisition to permit for conducting the Add-on Certification Course.

The department of Mechanical Engineering has decided to provide a 5 Days (35 Hrs.) training program on 'Business Intelligence'(ME21002) for Second Year ME Students at ACE College of Engineering. The certificate will be given by the department. The Course date and schedule are listed below for your kind approval.

Date		Batch
From	To	
11/10/2021	15/10/2021	S3 ME

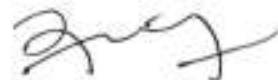
Thanking You

Yours Truly

ACE TVM,
4/10/2021


PRINCIPAL
ACE College of Engineering
Thiruvananthapuram-695 027





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Cohen
2021



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☎ +91 4717117777 / 87 / 97 ☉ info@acevtm.com ☉ www.acevtm.com



Department of Mechanical Engineering

Circular

Date: 3/10/2021

The Department of Mechanical Engineering will be conducting a 5 Days (35 Hrs.) training program on 'Business Intelligence'(ME21002) for Second Year ME Students at Mechanical Workshop, ACE College of Engineering from 11/10/2021 to 15/10/2021. Subject experts will be talking to you in the session. Students are requested to register & attend the program. Fullest cooperation is expected for the successful conduct of the training. Attendance is compulsory.


Coordinator




HOD


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Thiruvallam P.O.
Thiruvananthapuram-695 027



ACE College of Engineering

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DEPARTMENT OF MECHANICAL ENGINEERING Course Contents for Business Intelligence(ME21002)

Academic Year: 2021-22

Date:06/10/20221

SYLLABUS

1. Introduction to Business Intelligence (4 hours)

- Data Analysis
- Business Information Management(3 hours)

2. Basic processes of BI (4 hours)

- Reporting
- Online Analytical Processing
- Analytics
- Dashboard development
- Data Mining (3 hours)
- Process Mining

3. Strategic Business(4 hours)

- Data Gathering(4 hours)
- Data Storage
- Knowledge Management (3 hours)

4. Basic Elements (3 hours)

- Multidimensional aggregation and allocation
- Denormalization, tagging, and standardization
- Realtime reporting with analytical alert
- A method of interfacing with unstructured data sources

5. Big Data & Predictive Analysis(4 hours+3 hours)

- Managing enormous data sets to make extraction and data analysis easier.
- Use of data, algorithms, and models to predict outcomes based on historical data.



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Department of Mechanical Engineering

Resource Person Profile

Resource Person Name	: Mr. Nandu Bhadran
Designation	: Assistant Professor, Department of ME
Specialization	: M.tech in Machine Design
Areas of Interest	: Machine Design, Production Engineering,
Computer Aided Design	
Teaching Experience	: 4 years
Email ID	: nandubhadran@acetvm.com

Mr. Nandu Bhadran is an all-rounder. He is the NSS Co-ordinator of Ace College of Engineering. He is also the in-charge of the IEDC cell. He worked as the Coordinator of Epoch, conducted by Ace College of Engineering.


Coordinator


HOD



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DEPARTMENT OF MECHANICAL ENGINEERING Timetable for Business Intelligence (ME21002)

Academic Year: 2021-22

Date : 04/10/2021

DAY/ PERIOD	1	2	3	4		5	6	7
	8 :40 AM – 9: 35 AM	9:35 AM – 10: 30 AM	10 : 45 AM – 11: 40 AM	11 : 40 AM – 12 : 35 PM		1 :25 PM – 2 : 20 PM	2 : 20 PM – 3 :10 PM	3 : 20 PM – 4 : 10 PM
11/10/2021	Business Intelligence Introduction				LUNCH 12.35PM – 1.25PM	Business Information Management		
12/10/2021	Business Intelligence Basic processes					Business Intelligence Data Mining		
13/10/2021	Business Intelligence Strategic Business					Business Intelligence Basic Elements		
14/10/2021	Business Intelligence Data Gathering					BI Knowledge Management		
15/10/2021	Business Intelligence Big Data					Business Intelligence Predictive Analysis		FEEDBACK

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Department of Mechanical Engg presents

BUSINESS INTELLIGENCE

RESOURCE PERSON: MR. MANJUNATH ETTAIDRAM

11/10/2021-15/10/2021

Mr. Afsal KF
Coordinator

Prof. Sivakumar
HOD
Dr. Farrukh Sayeed
Patron

ACE

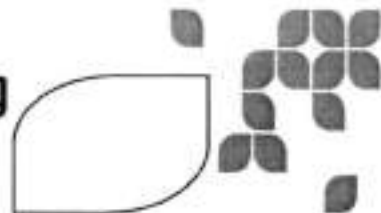
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ENGINEERING

Thiruvananthapuram



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DEPARTMENT OF MECHANICAL ENGINEERING Enrolled Students List for Business Intelligence (ME21002)

Academic Year: 2021-22

Date : 5/10/2021

Sl. No.	Register Number	Candidate Name	Signature
1.	ACE20ME001	ABDUL AZEEZ AZEEF	
2.	ACE20ME002	ABDUL KHAYUM S	
3.	ACE20ME003	ABHIRAM D S	
4.	ACE20ME004	ADISH CHANDRAN R B	
5.	ACE20ME005	ADISH S	
6.	ACE20ME006	AFSAL KHAN A	
7.	ACE20ME007	AJAY SEKHAR J S	
8.	ACE20ME008	AKASH NARAYANAN P	
9.	ACE20ME009	ALAN LALI	
10.	ACE20ME010	ANANDHU A	
11.	ACE20ME011	ARJUN PRAKASH	
12.	ACE20ME012	ASIF MOHAMMED	
13.	ACE20ME013	GAUTHAM R J	
14.	ACE20ME014	GAUTHAM S M	
15.	ACE20ME015	GOKUL J ANAND	
16.	ACE20ME016	GOKUL RAJ R	

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17.	ACE20ME017	JJO S	<i>Jjo</i>
18.	ACE20ME018	JOSHUA JAYAN	<i>JJ</i>
19.	ACE20ME019	MUHAMMAD USMAN S	<i>Ugman</i>
20.	ACE20ME020	PRAMESH P S	<i>Pr</i>
21.	ACE20ME021	SAHEER A S	<i>Scheer</i>
22.	ACE20ME022	SAURAV SAJEEV	<i>ss</i>
23.	ACE20ME023	SEYYADALI A	<i>ali</i>
24.	ACE20ME024	SREEDEV AS	<i>Sans</i>
25.	ACE20ME025	SREEREJ R SUGATHAN	<i>sreeej</i>
26.	ACE20ME026	S S MOHAMMED SUFAIL	<i>Safaaf</i>
27.	ACE20ME027	VAISHNAV M S	<i>Vaish</i>
28.	ACE20ME028	VINOD VIJAY V	<i>VVV</i>
29.	ACE20ME029	VISWAJITH S	<i>Venise</i>
30.	LACE20ME030	GURUDATH E V	<i>Pan</i>

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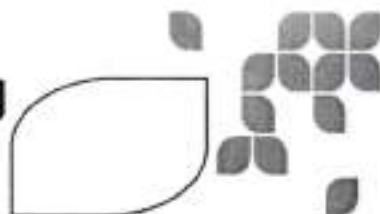




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DEPARTMENT OF MECHANICAL ENGINEERING Students Attendance for Business Intelligence (ME21002)

Academic Year: 2021-22

Date :11/10/2021-15/10/21

Sl. No.	Candidate Name	Kindly Mark Your Attendance				
		11/10/21	12/10/21	13/10/21	14/10/21	15/10/21
1.	ABDUL AZEEZ AZEEF	P	P	P	P	P
2.	ABDUL KHAYUM S	P	P	P	P	P
3.	ABHIRAM D S	A	P	P	P	P
4.	ADISH CHANDRAN R B	P	P	P	P	P
5.	ADISH S	P	P	P	P	P
6.	AFSAL KHAN A	P	P	P	P	P
7.	AJAY SEKHAR J S	P	P	P	P	P
8.	AKASH NARAYANAN P	P	A	P	P	P
9.	ALAN LALI	P	P	P	P	P
10.	ANANDHU A	P	P	P	P	P
11.	ARJUN PRAKASH	P	P	P	P	P
12.	ASIF MOHAMMED	P	P	P	A	P
13.	GAUTHAM R J	P	P	P	P	P
14.	GAUTHAM S M	P	P	P	P	P
15.	GOKUL J ANAND	P	P	P	P	P
16.	GOKUL RAJ R	P	A	P	P	P

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Principal
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17.	JIJOS	A	P	P	P	P
18.	JOSHUA JAYAN	P	P	P	P	P
19.	MUHAMMAD USMAN S	P	P	P	P	P
20.	PRAMESH P S	P	P	P	P	P
21.	SAHEER A S	P	P	A	P	P
22.	SAURAV SAJEEV	P	P	P	P	P
23.	SEYYADALI A	P	P	P	P	P
24.	SREEDEV AS	P	P	P	P	P
25.	SREEREJ R SUGATHAN	P	P	P	P	P
26.	S S MOHAMMED SUFAIL	P	P	P	P	P
27.	VAISHNAV M S	A	P	P	P	P
28.	VINOD VIJAY V	P	P	P	P	P
29.	VISWAJITH S	P	P	P	P	P
30.	GURUDATH E V	P	P	P	A	P

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DEPARTMENT OF MECHANICAL ENGINEERING
Course Completion Students List for Business Intelligence (ME21002)
Academic Year: 2021-22 **Date : 15/10/2021**

Sl. No.	Register Number	Candidate Name	Course Completed
1.	ACE20ME001	ABDUL AZEEZ AZEEF	✓
2.	ACE20ME002	ABDUL KHAYUM S	✓
3.	ACE20ME003	ABHIRAM D S	✓
4.	ACE20ME004	ADISH CHANDRAN R B	✓
5.	ACE20ME005	ADISH S	✓
6.	ACE20ME006	AFSAL KHAN A	✓
7.	ACE20ME007	AJAY SEKHAR J S	✓
8.	ACE20ME008	AKASH NARAYANAN P	✓
9.	ACE20ME009	ALAN LALI	✓
10.	ACE20ME010	ANANDHU A	✓
11.	ACE20ME011	ARJUN PRAKASH	✓
12.	ACE20ME012	ASIF MOHAMMED	✓
13.	ACE20ME013	GAUTHAM R J	✓
14.	ACE20ME014	GAUTHAM S M	✓
15.	ACE20ME015	GOKUL J ANAND	✓

Signature
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16.	ACE20ME016	GOKUL RAJ R	✓
17.	ACE20ME017	JIJIO S	✓
18.	ACE20ME018	JOSHUA JAYAN	✓
19.	ACE20ME019	MUHAMMAD USMAN S	✓
20.	ACE20ME020	PRAMESH P S	✓
21.	ACE20ME021	SAHEER A S	✓
22.	ACE20ME022	SAURAV SAJEEV	✓
23.	ACE20ME023	SEYYADALI A	✓
24.	ACE20ME024	SREEDEV AS	✓
25.	ACE20ME025	SREEREJ R SUGATHAN	✓
26.	ACE20ME026	S S MOHAMMED SUFAIL	✓
27.	ACE20ME027	VAISHNAV M S	✓
28.	ACE20ME028	VINOD VIJAY V	✓
29.	ACE20ME029	VISWAJITH S	✓
30.	LACE20ME030	GURUDATH E V	✓



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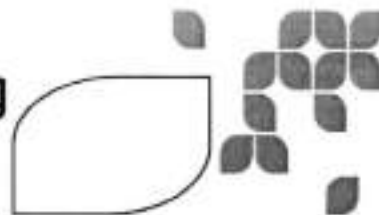
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DEPARTMENT OF MECHANICAL ENGINEERING Assessment Questions for Business Intelligence (ME21002)

Academic Year: 2021-22

All questions are practical in nature.

1. Describe Business Intelligence?
2. Describe Data Mining?
3. Show the steps in Business Intelligence.
4. What are the softwares used in Business Intelligence?
5. Show the practical application of Business Intelligence in management.
6. Explain OLAP.
7. Explain CRM using software.
8. Explain ERP implementation using software.
9. With the help of the software describe the basic elements of Business Intelligence.
10. Explain exploratory data analysis with an example.

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DEPARTMENT OF MECHANICAL ENGINEERING

Students List for Business Intelligence (ME21002)

Academic Year: 2021-22

Date : 18/10/2021

Sl. No.	Register Number	Candidate Name	Marks out of 25
1.	ACE20ME001	ABDUL AZEEZ AZEEF	25
2.	ACE20ME002	ABDUL KHAYUM S	25
3.	ACE20ME003	ABHIRAM D S	25
4.	ACE20ME004	ADISH CHANDRAN R B	25
5.	ACE20ME005	ADISH S	25
6.	ACE20ME006	AFSAL KHAN A	25
7.	ACE20ME007	AJAY SEKHAR J S	25
8.	ACE20ME008	AKASH NARAYANAN P	25
9.	ACE20ME009	ALAN LALI	25
10.	ACE20ME010	ANANDHU A	25
11.	ACE20ME011	ARJUN PRAKASH	25
12.	ACE20ME012	ASIF MOHAMMED	25
13.	ACE20ME013	GAUTHAM R J	25
14.	ACE20ME014	GAUTHAM S M	25
15.	ACE20ME015	GOKUL J ANAND	25
16.	ACE20ME016	GOKUL RAJ R	25
17.	ACE20ME017	JIJU S	25

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18.	ACE20ME018	JOSHUA JAYAN	25
19.	ACE20ME019	MUHAMMAD USMAN S	25
20.	ACE20ME020	PRAMESH P S	25
21.	ACE20ME021	SAHEER A S	25
22.	ACE20ME022	SAURAV SAJEEV	25
23.	ACE20ME023	SEYYADALI A	24
24.	ACE20ME024	SREEDEV AS	24
25.	ACE20ME025	SREEREJ R SUGATHAN	24
26.	ACE20ME026	S S MOHAMMED SUFAIL	24
27.	ACE20ME027	VAISHNAV M S	24
28.	ACE20ME028	VINOD VIJAY V	24
29.	ACE20ME029	VISWAJITH S	24
30.	LACE20ME030	GURUDATH E V	25

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DEPARTMENT OF MECHANICAL ENGINEERING Summary Report with Course Outcome 2021-2022

Course Name : Business Intelligence (ME21002)
Course Duration : 35 Hours
Year offered : 2nd Year ME Students- 2021-2022
Course Instructors : Mr. Nandu Bhadran
Assistant Professor/ ME

Course outcome

Students could understand the basics of Business Intelligence. The steps required for Business Intelligence were discussed. The basic cycle of BI was investigated. The softwares used for BI was familiarized. The basic elements of BI were discussed.

Course type : Self framed value added course

Assessment Mode

Attendance : 35 Hrs
Number of Participants : 30
Scheme of exam : Physical Answer sheet mode
Date of exam : 18/10/2021




Course Coordinator


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DEPARTMENT OF MECHANICAL ENGINEERING

Course Coordinator Report 2021-2022

Course Name	:	Business Intelligence(ME21002)
Course Duration	:	35 Hours
Year offered	:	2 nd Year ME Students- 2021-2022
Course Coordinator	:	Mr. Afsal KF Assistant Professor/ ME
Course type	:	Self framed value added course

The Certificate program of 'Business Intelligence' was conducted for the 2nd year Mechanical Engineering Students. The total period of 35Hrs has been planned and executed as per the course plan.

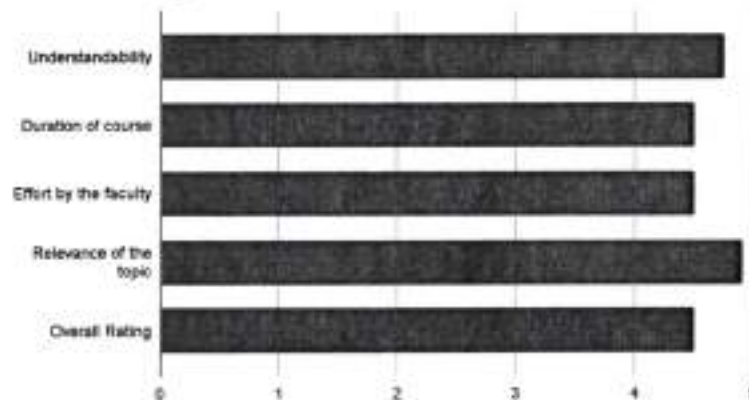
Assessment Mode

Number of students Enrolled	:	30
Number of students Appeared	:	30
Scheme of exam	:	Physical Answer sheet mode
Date of exam	:	18/10/2021
Number of students Passed	:	30

Course Feedback

The feedback was obtained from the participants after the course and a detailed analysis report is listed below.

Business Intelligence




Course Coordinator


HOD


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Thiruvananthapuram-695 027



Certificate of Participation

THIS CERTIFICATE IS PRESENTED TO

ABHIRAM D S

FOR PARTICIPATING IN THE COURSE 'BUSINESS INTELLIGENCE', CONDUCTED
BY DEPARTMENT OF MECHANICAL ENGINEERING, ACE COLLEGE OF
ENGINEERING, FROM 11/10/2021 TO 15/10/2021.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD

Certificate of Participation

THIS CERTIFICATE IS PRESENTED TO

ABDUL AZEEZ AZEEF

FOR PARTICIPATING IN THE COURSE 'BUSINESS INTELLIGENCE', CONDUCTED
BY DEPARTMENT OF MECHANICAL ENGINEERING, ACE COLLEGE OF
ENGINEERING, FROM 11/10/2021 TO 15/10/2021.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD


PRINCIPAL
ACE College of Engineering
Thiruvallam P.O.
Thiruvananthapuram-695 027

Certificate of Participation

THIS CERTIFICATE IS PRESENTED TO

ABDUL KHAYUM S

FOR PARTICIPATING IN THE COURSE 'BUSINESS INTELLIGENCE', CONDUCTED
BY DEPARTMENT OF MECHANICAL ENGINEERING, ACE COLLEGE OF
ENGINEERING, FROM 11/10/2021 TO 15/10/2021.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD

Certificate of Participation

THIS CERTIFICATE IS PRESENTED TO

ADISH S

FOR PARTICIPATING IN THE COURSE 'BUSINESS INTELLIGENCE', CONDUCTED
BY DEPARTMENT OF MECHANICAL ENGINEERING, ACE COLLEGE OF
ENGINEERING, FROM 11/10/2021 TO 15/10/2021.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD

Certificate of Participation

THIS CERTIFICATE IS PRESENTED TO

ADISH CHANDRAN R B

FOR PARTICIPATING IN THE COURSE 'BUSINESS INTELLIGENCE', CONDUCTED
BY DEPARTMENT OF MECHANICAL ENGINEERING, ACE COLLEGE OF
ENGINEERING, FROM 11/10/2021 TO 15/10/2021.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD



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From

The Head of the Department,
Department of Mechanical Engineering,
ACE College of Engineering,
Trivandrum

To

The Principal
ACE College of Engineering,
Trivandrum

Respected Sir

Sub: Requisition to permit for conducting the Add-on Certification Course.

The department of Mechanical Engineering has decided to conduct a 5 Days (35 Hrs.) training program on 'Vehicle Overhauling' (ME21001) for Fourth Year ME Students at ACE College of Engineering. The certificate will be given by the department to those students who successfully complete the course. The Course date and schedule are listed below for your kind approval.

Date		Batch
From	To	
14/3/2022	18/3/2022	S8 ME

Thanking You

Yours Truly

ACE TVM,

7/3/2022

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HEAD OF DEPARTMENT
Dept. of Mechanical Engineering
ACE College of Engineering
Thiruvallam P.O.
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Department of Mechanical Engineering

Circular

Date: 08/03/2022

The Department of Mechanical Engineering will be conducting a 5 Days (35 Hrs.) training program on 'Vehicle Overhauling' (ME21001) for Fourth Year ME Students at Mechanical Workshop, ACE College of Engineering from 14/03/2022 to 18/03/2022. Students are requested to register & attend the program without any excuse. Experts will be talking to you in the sessions. Fulllest cooperation is expected from the students for the successful conduct of the training. Attendance is compulsory.


Coordinator


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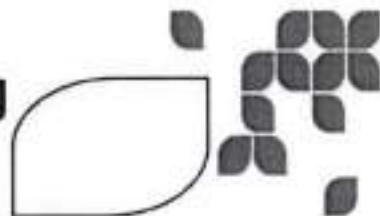


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DEPARTMENT OF MECHANICAL ENGINEERING Course Contents for Vehicle Overhauling (ME21001)

Academic Year: 2021-22

Date :10/3/2022

SYLLABUS

1. Vehicle Overhauling

- Basic concepts on vehicles (4 hours)
- Parts of automobiles (3 hours)
- Functions of each part

2. Evolution of Tyre and Brake System (4 hours + 3 hours)

- Types of Tyres.
- Selection
- Installation

3. Automotive Engine Types (4 hours + 3 hours)

- Selection
- Classification and uses

4. Automated Cooling System (4 hours + 3 hours)

- Types, Selection, installation.

5. Application on a Real Project. (4 hours + 2 hours)

- Dismantling of different parts of an automobile
- Study and observe each and every part.
- Dismantling of automotive engines.
- Study and observe the different parts.
- Study the different systems associated with an automobile.

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Department of Mechanical Engineering

Resource Person Profile

Resource Person Name	: Mr. Arunraj R
Designation	: Assistant Professor, Department of ME
Specialization	: M.tech in Machine Design
Areas of Interest	: Machine Design, Automobile Engineering, Fluid Structural Interaction, Computer Aided Design and Analysis.
Teaching Experience	: 7 years
Email	: arunraj.r@acetvm.com

Sl.No	List of Journals and Publications
1.	"A Study on the nature of Fluid Transients on varying conduit parameters during valve closure", International Journal of Scientific & Engineering Research, Volume 5, Issue 7, July-2014 ISSN 2229-5518
2.	"Parametric study on Fluid Transients in Conduits", 2nd International Conference on Materials Mechanics and Management (IMMM2014), College of Engineering Trivandrum.


 Coordinator




 HOD


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DEPARTMENT OF MECHANICAL ENGINEERING Timetable for Vehicle Overhauling (ME21001)

Academic Year: 2021-22

Date : 07/03/2022

DAY/ PERIOD	1	2	3	4		5	6	7
	8 :40 AM - 9: 35 AM	9:35 AM - 10: 30 AM	10 : 45 AM - 11: 40 AM	11 : 40 AM - 12 : 35 PM		1 :25 PM - 2 : 20 PM	2 : 20 PM - 3 :10 PM	3 : 20 PM - 4 : 10 PM
14/03/2022	Vehicle Overhauling Basic Concepts				LUNCH 12.35PM - 1.25PM	Parts of Automobiles		
15/03/2022	Vehicle Overhauling Tyre System					Vehicle Overhauling Brake System		
16/03/2022	Vehicle Overhauling Engine Study					Vehicle Overhauling Engine Types		
17/03/2022	Automated Cooling System 1					Automated Cooling System 2		
18/03/2022	Vehicle Overhauling real project					Vehicle Overhauling Dismantling		FEEDBACK

Sayed



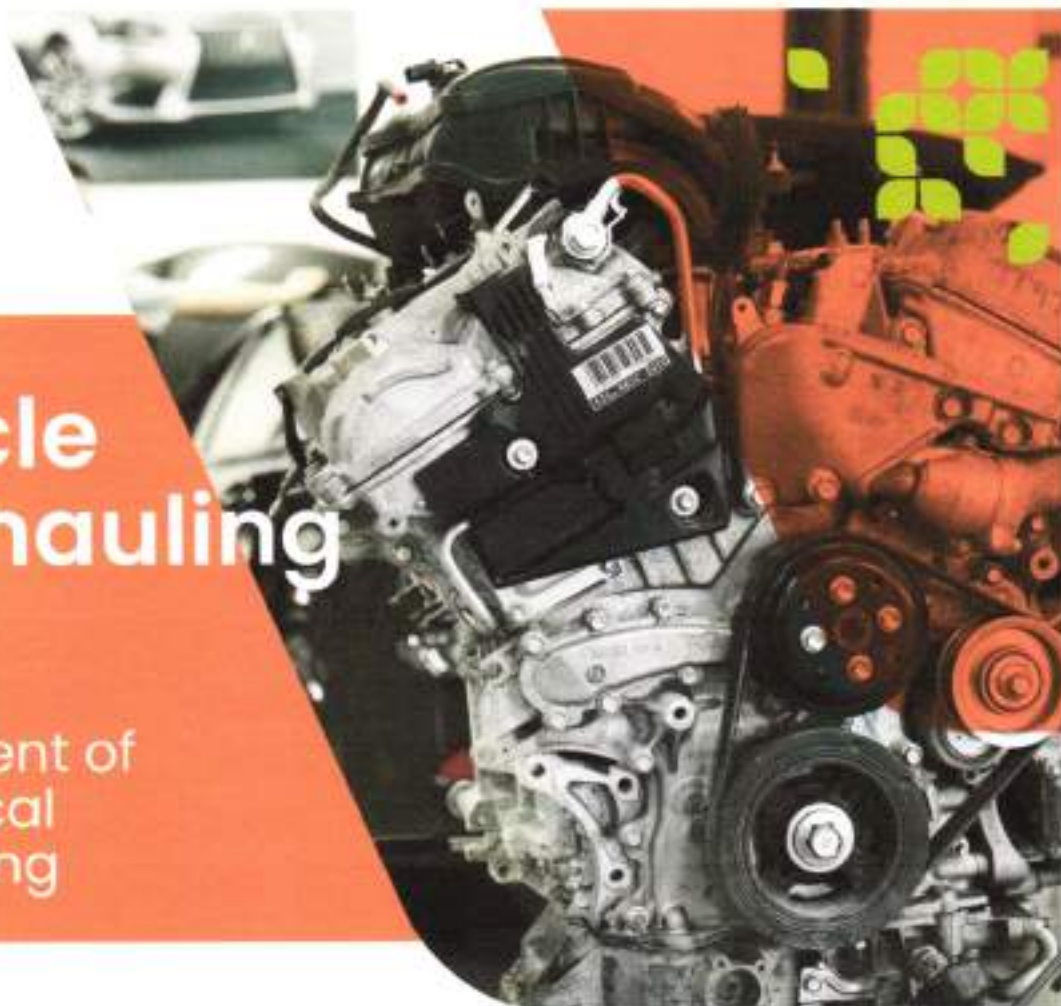
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Vehicle Overhauling

Department of
Mechanical
Engineering



Duration: 14/03/2022 – 18/03/2022

Resource Person
Mr. Arunraj R

Convener (HOD)
Prof. Sivakumar

Coordinator
(Assistant Professor)
Afsal K F

Patron
Dr. Farrukh Sayeed
Principal



Farrukh Sayeed
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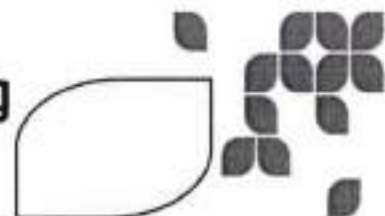
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DEPARTMENT OF MECHANICAL ENGINEERING Enrolled Students List for Vehicle Overhauling (ME21001)

Academic Year: 2021-22

Date : 8/10/2021

Sl. No.	Register Number	Candidate Name	Signature
1.	ACE18ME008	AMAL KRISHNA M	
2.	ACE18ME007	AL AMEEN HAFIS AMEER	
3.	ACE18ME006	AKSHAY M NAIR	
4.	ACE18ME005	AKHIL P R	
5.	ACE18ME004	AKHILDEV D	
6.	ACE18ME003	ADARSH ANIL KUMAR	
7.	ACE18ME002	ABIJITH R P	
8.	ACE18ME001	ABHIJITH M S	
9.	LACE18ME031	NIKHIL R B	
10.	LACE18ME030	MUHAMAD FAYAS A S	
11.	ACE18ME018	MITHUN R	
12.	ACE18ME016	JAIWIN J PRAKASH	
13.	ACE18ME017	KARTHIK A T	
14.	ACE18ME015	HARI SANKAR M R	
15.	ACE18ME014	HARIKRISHNAN K	
16.	ACE18ME013	HAMEEM MUHAMMAD N	

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17.	ACE18ME012	DEVANG GOPALAKRISHNAN	<u>Dev</u>
18.	ACE18ME011	ASIF NABIL S	<u>Asif</u>
19.	ACE18ME010	ARAVIND J	<u>Arav</u>
20.	ACE18ME009	ANET ANILKUMAR	<u>Anet</u>
21.	ACE18ME019	MOHAMED SIYAD	<u>Siyad</u>
22.	ACE18ME020	MOHAMMAD SUFIYAN S	<u>Sufiyan</u>
23.	ACE18ME021	MUBEEN MOHAMMED	<u>Mubeen</u>
24.	ACE18ME022	MUHAMMED NAFIUH S	<u>Nafiu</u>
25.	ACE18ME023	P D RESHMA	<u>Reshma</u>
26.	ACE18ME024	PRANAV B S	<u>Pranav</u>
27.	ACE18ME025	RAMESH KRISHNAN R	<u>Ramesh</u>
28.	ACE18ME026	RENJITH G R	<u>Renjith</u>
29.	ACE18ME027	R KRISHNAN	<u>R Krishnan</u>
30.	ACE18ME028	SOURAV SUNIL	<u>Sourav</u>
31.	ACE18ME029	VIGNESH S	<u>Vignesh</u>

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DEPARTMENT OF MECHANICAL ENGINEERING Students Attendance for Vehicle Overhauling (ME21001)

Academic Year: 2021-22

Date : 14/3/2022-18/3/22

Sl. No.	Candidate Name	Kindly Mark the Attendance				
		14/3/22	15/3/22	16/3/22	17/3/22	18/3/22
1.	AMAL KRISHNA M	P	P	P	P	P
2.	AL AMEEN HAFIS AMEER	P	P	P	P	P
3.	AKSHAY M NAIR	A	P	P	P	P
4.	AKHIL P R	P	P	P	P	P
5.	AKHILDEV D	P	P	P	P	P
6.	ADARSH ANIL KUMAR	P	P	P	P	P
7.	ABIJITH R P	P	P	P	A	P
8.	ABHIJITH M S	P	P	P	P	P
9.	NIKHIL R B	P	P	P	P	P
10.	MUHAMAD FAYAS A S	P	P	P	P	P
11.	MITHUN R	P	P	P	P	P
12.	JAIWIN J PRAKASH	A	P	P	P	P
13.	KARTHIK A T	P	P	P	P	P
14.	HARI SANKAR M R	P	P	P	A	P

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15.	HARIKRISHNAN K	P	P	P	P	P
16.	HAMEEM MUHAMMAD N	P	P	A	P	P
17.	DEVANG GOPALAKRISHNAN	P	P	P	P	P
18.	ASIF NABIL S	P	P	P	P	P
19.	ARAVIND J	P	P	P	P	P
20.	ANET ANILKUMAR	A	P	P	P	P
21.	MOHAMED SIYAD	P	P	P	P	P
22.	MOHAMMAD SUFIYAN S	P	P	P	P	P
23.	MUBEEN MOHAMMED	P	P	P	P	P
24.	MUHAMMED NAFIUH S	P	P	P	P	P
25.	P D RESHMA	P	P	P	P	P
26.	PRANAV B S	P	P	A	P	P
27.	RAMESH KRISHNAN R	P	P	P	P	P
28.	RENJITH G R	P	P	P	P	P
29.	R KRISHNAN	P	P	P	P	P
30.	SOURAV SUNIL	P	P	P	P	P
31.	VIGNESH S	A	P	P	P	P

Signature

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Signature



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DEPARTMENT OF MECHANICAL ENGINEERING Course Completion List for Vehicle Overhauling (ME21001)

Academic Year: 2021-22

Date : 18/10/2021

Sl. No.	Register Number	Candidate Name	Course Completed
1.	ACE18ME008	AMAL KRISHNA M	✓
2.	ACE18ME007	AL AMEEN HAFIS AMEER	✓
3.	ACE18ME006	AKSHAY M NAIR	✓
4.	ACE18ME005	AKHIL P R	✓
5.	ACE18ME004	AKHILDEV D	✓
6.	ACE18ME003	ADARSH ANIL KUMAR	✓
7.	ACE18ME002	ABIJITH R P	✓
8.	ACE18ME001	ABHIJITH M S	✓
9.	LACE18ME031	NIKHIL R B	✓
10.	LACE18ME030	MUHAMAD FAYAS A S	✓
11.	ACE18ME018	MITHUN R	✓
12.	ACE18ME016	JAIWIN J PRAKASH	✓
13.	ACE18ME017	KARTHIK A T	✓
14.	ACE18ME015	HARI SANKAR M R	✓
15.	ACE18ME014	HARIKRISHNAN K	✓
16.	ACE18ME013	HAMEEM MUHAMMAD N	✓
17.	ACE18ME012	DEVANG GOPALAKRISHNAN	✓

Signature
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18.	ACE18ME011	ASIF NABIL S	✓
19.	ACE18ME010	ARAVIND J	✓
20.	ACE18ME009	ANET ANILKUMAR	✓
21.	ACE18ME019	MOHAMED SIYAD	✓
22.	ACE18ME020	MOHAMMAD SUFIYAN S	✓
23.	ACE18ME021	MUBEEN MOHAMMED	✓
24.	ACE18ME022	MUHAMMED NAFIUH S	✓
25.	ACE18ME023	P D RESHMA	✓
26.	ACE18ME024	PRANAV B S	✓
27.	ACE18ME025	RAMESH KRISHNAN R	✓
28.	ACE18ME026	RENJITH G R	✓
29.	ACE18ME027	R KRISHNAN	✓
30.	ACE18ME028	SOURAV SUNIL	✓
31.	ACE18ME029	VIGNESH S	✓

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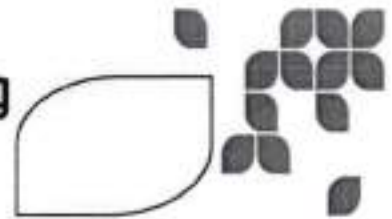


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Assessment Questions for Vehicle Overhauling(ME21001)

Academic Year: 2021-22

All questions are compulsory and practical in nature.

1. Explain the advanced technologies in automobiles.
2. Explain the features you noted in a Maruti 800 car.
3. What is vehicle integration engineering?
4. What are the emergency measures in a car?
5. Which all components did you see in engine dismantling?
6. Explain the functions of components that you saw in dismantling.
7. Explain the process of dismantling in detail.
8. Explain the lubrication system in detail.
9. Explain the brake system in detail. Explain the engine structure in detail.

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DEPARTMENT OF MECHANICAL ENGINEERING

Students Assessment Marks for Vehicle Overhauling (ME21001)

Academic Year: 2021-22

Date : 18/3/22

Sl. No.	Candidate Name	Marks out of 25
1.	AMAL KRISHNA M	25
2.	AL AMEEN HAFIS AMEER	25
3.	AKSHAY M NAIR	25
4.	AKHIL P R	25
5.	AKHILDEV D	25
6.	ADARSH ANIL KUMAR	25
7.	ABIJITH R P	25
8.	ABHIJITH M S	25
9.	NIKHIL R B	25
10.	MUHAMAD FAYAS A S	25
11.	MITHUN R	25
12.	JAIWIN J PRAKASH	25
13.	KARTHIK A T	25
14.	HARI SANKAR M R	25
15.	HARIKRISHNAN K	25

25/3/22
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16.	HAMEEM MUHAMMAD N	25
17.	DEVANG GOPALAKRISHNAN	25
18.	ASIF NABIL S	25
19.	ARAVIND J	25
20.	ANET ANILKUMAR	25
21.	MOHAMED SIYAD	25
22.	MOHAMMAD SUFIYAN S	25
23.	MUBEEN MOHAMMED	25
24.	MUHAMMED NAFIUH S	25
25.	P D RESHMA	25
26.	PRANAV B S	24
27.	RAMESH KRISHNAN R	24
28.	RENJITH G R	24
29.	R KRISHNAN	24
30.	SOURAV SUNIL	25
31.	VIGNESH S	25

25/05/2022

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DEPARTMENT OF MECHANICAL ENGINEERING

Summary Report with Course Outcome 2021-2022

Course Name : Vehicle Overhauling (ME21001)
Course Duration : 35 Hours
Year offered : 4th Year ME Students- 2021-2022
Course Instructors : Mr. Arunraj R
Assistant Professor/ ME

Course outcome

Students could understand the basic parts of a vehicle and study their assembly. Hands-on training was given to them on engine dismantling and each and every part of the engine was studied in detail. Different systems associated with the vehicle were also studied.

Course type : Self framed value added course

Assessment Mode

Attendance : 35 Hrs
Number of Participants : 31
Scheme of exam : Physical Answer sheet mode
Date of exam : 21/03/2022




Course Coordinator


HoD

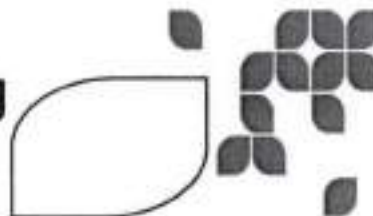

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DEPARTMENT OF MECHANICAL ENGINEERING Course Coordinator Report 2021-2022

Course Name : Vehicle Overhauling (ME21001)
Course Duration : 35 Hours
Year offered : 4th Year ME Students- 2021-2022
Course Coordinator : Mr. Afsal KF
Assistant Professor/ ME
Course type : Self framed value added course

The Certificate program of 'Vehicle Overhauling' was conducted for the 2nd year Mechanical Engineering Students. The total period of 35Hrs has been planned and executed as per the course plan.

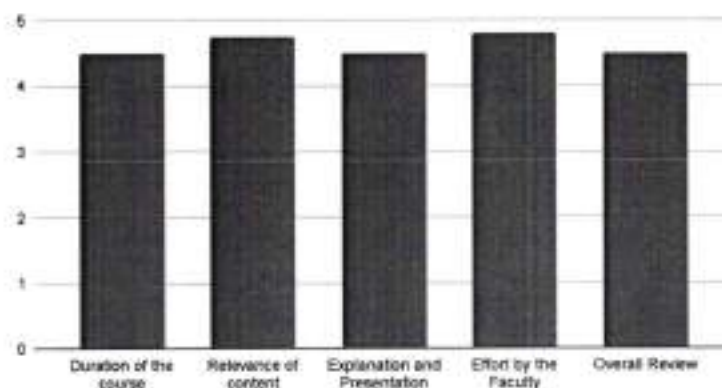
Assessment Mode

Number of students Enrolled : 31
Number of students Appeared : 31
Scheme of exam : Physical Answer sheet mode
Date of exam : 21/03/2022
Number of students Passed : 31

Course Feedback

The feedback was obtained from the participants after the course and a detailed analysis report is listed below.

Points scored




Course Coordinator


HOD


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CERTIFICATE

OF PARTICIPATION

This certificate is presented to:

MUHAMMED NAFIUH S

for participating in the course 'Vehicle Overhauling' conducted by Department of Mechanical Engineering, ACE College of Engineering, from 14/3/2022 to 18/03/22.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD


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Thiruvallur P.O.
Thiruvananthapuram-695 027

CERTIFICATE

OF PARTICIPATION

This certificate is presented to:

R KRISHNAN

for participating in the course 'Vehicle Overhauling' conducted by Department of Mechanical Engineering, ACE College of Engineering, from 14/3/2022 to 18/03/22.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD


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Thiruvellam P.O
Thiruvananthapuram-695 027

CERTIFICATE

OF PARTICIPATION

This certificate is presented to:

RAMESH KRISHNAN R

for participating in the course 'Vehicle Overhauling' conducted by Department of Mechanical Engineering, ACE College of Engineering, from 14/3/2022 to 18/03/22.


MR. AFSAL KF
COORDINATOR




PROF. SIVAKUMAR
HOD

PRINCIPAL
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Thiruvallur P.O.
Thiruvananthapuram-695 027

CERTIFICATE

OF PARTICIPATION

This certificate is presented to:

RENJITH G R

for participating in the course 'Vehicle Overhauling' conducted by Department of Mechanical Engineering, ACE College of Engineering, from 14/3/2022 to 18/03/22.


MR. AFSAL K
COORDINATOR




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PROF. SIVAKUMAR
HOD

CERTIFICATE

OF PARTICIPATION

This certificate is presented to:

SOURAV SUNIL

for participating in the course 'Vehicle Overhauling' conducted by Department of Mechanical Engineering, ACE College of Engineering, from 14/3/2022 to 18/03/22.


MR. AFSAL KF
COORDINATOR



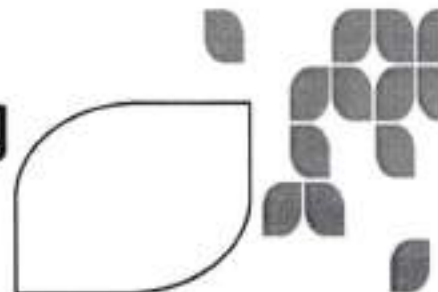

PROF. SIVAKUMAR
HOD



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From

Anuroopa A
Associate Professor & HOD
Department of Electrical and Electronics
ACE College of Engineering,
Thiruvananthapuram

Date: 17/11/2021

To

The Principal
ACE College of Engineering,
Thiruvananthapuram

Respected Sir,

Sub: Permission for Conducting Certificate Program - reg.

I am writing to request your permission to conduct an Add-on course on Introduction to Arduino (EEE21001) for the students of III Year EEE. The course will be held from 06.12.2021 to 10.12.2021. Mrs. Jimshitha E S - Assistant Professor/EEE at ACE College of Engineering will be the coordinator of this program. I believe that the students will benefit from this program. The certificate will be provided by the department to each participant upon completion of the course. Kindly give our request a favorable consideration.

Your Faithfully


Anuroopa A




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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CIRCULAR

Date: 19/11/2021

It is hereby informed to all the third year students of the Electrical and Electronics Department that we are conducting a 5 Days training program on Introduction to Arduino from **06/12/2021 to 10/12/2021** at EEE department. All students are cordially invited to register & attend the training program.


Coordinator


HOD





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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

EEE21001: COURSE ON INTRODUCTION TO ARDUINO

Academic Year 2021-2022

COURSE CONTENTS

Course Introduction (2 hr)
Hardware Overview (2hr)
Download and Install the Arduino IDE (1hr)
Arduino IDE and Sketch Overview (2 hr)
Arduino – Data Types, variables, loop etc (2hrs)
Arduino – Strings, Array (2hrs)
Arduino – function libraries (3 Hrs)
Arduino – Pulse Width Modulation (2hr)
Arduino – Interrupts (2 hr)
Arduino – Communication (2 hr)
Arduino – Inter Integrated Circuit (1 hr)
Arduino – projects (7hrs)
Arduino – sensors (3hr)
Arduino – motor control (3hr)

Course Coordinator



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RESOURCE PERSON PROFILE

Vishakh K H

Assistant Professor

Dept of Electrical and Electronics Engineering

ACE College of Engineering, Thiruvallom

Qualification:

- Bachelor of Technology in Electrical and Electronics Engineering from Amrita school of Engineering
- Master of Technology in Industrial Instrumentation and Control from TKM College of Engineering
- pursuing Phd from Amrita school of Engineering

Publications:

- Fault Detection Isolation Restoration of an Active Distribution Network
- Control of longitudinal dynamics in the Reentry Phase of a Reusable Launch Vehicle
- Comparison of Estimation capabilities of Extended and Unscented Kalman Filter in an RLV

Achievements:

- Qualified GATE 2011 and 2012
- Attended JAVA Course from Oracle Academy
- Visvesvaraya scholarship holder from ministry of electronics and IT, Government of India.



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DAY / PERIOD	1	2	T E A C H E R E A K	3	4	L U N C H B R E A K	5	6	7	
06/12/2021	Course Introduction			Hardware Overview			Download and Install the Arduino IDE	Arduino IDE and Sketch Overview		
07/12/2021	Arduino – Data Types,variables, loop			Arduino – Strings,Array			ARDUINO – FUNCTION LIBRARIES			
08/12/2021	Arduino – Pulse Width Modulation			Arduino – Interrupts			Arduino – Communication			Arduino – Inter Integrated Circuit
09/12/2021	ARDUINO – PROJECTS			ARDUINO – PROJECTS			ARDUINO – PROJECTS			
10/12/2021	SENSORS			SENSORS	MOTOR CONTROL		MOTOR CONTROL			FEEDBACK

Thiruvallam P.O.



Sayant

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Introduction to Arduino

Department of
Electrical & Electronics
Engineering



Duration: 06/12/2021 – 10/12/2021

Resource Person

Mr. Vishakh Hariharan

Convener (HOD)

Anuroopa A

Coordinator
(Assistant Professor)

Mrs. Jimshitha E S



Patron

Dr. Farrukh Sayeed
Principal



Dr. Farrukh Sayeed

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Department of Electrical and Electronics Engineering			
Enrolled Students List			
EEE21001: COURSE ON INTRODUCTION TO ARDUINO			
Academic Year 2021-2022			
Sl No	Register Number	Name of Student	Signature
1	ACE19EE002	AKHIL S	
2	ACE19EE003	ANANDU A	
3	ACE19EE004	ARYA MURUGAN DM	
4	ACE19EE005	ASWIN VENU M	
5	ACE19EE007	FAYAS SHAJI RAHMAN	
6	ACE19EE008	FAZEELA S	
7	ACE19EE009	GOURI T SUGATHAN	
8	ACE19EE011	J AAYISHA	
9	ACE19EE012	MEGHA M	
10	ACE19EE013	MOHAMMAD FAYAZ	
11	ACE19EE014	MOHAMMED ABBAS N	
12	ACE19EE015	MUHAMMED AJMAL R S	
13	ACE19EE016	NAVAMI KRISHNA S	
14	ACE19EE017	NIHAL NAJEEB MOHAMMED	
15	ACE19EE018	NITHIN V	
16	ACE19EE019	PARVATHY G.M	
17	ACE19EE020	SARITHA S L	
18	ACE19EE021	SHIJIN CLIVE	
19	ACE19EE022	SHILPA MANOHAR	
20	ACE19EE023	SREEJITH RAJ S	
21	ACE19EE024	SULEKHA S	



Trivedi

Sajeed

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2021-2022

EEE21001: COURSE ON INTRODUCTION TO ARDUINO

ATTENDANCE SHEET

Sl No	Name of Student	6/12/2021	7/12/2021	8/12/2021	9/12/2021	10/12/2021
1	AKHIL S					
2	ANANDU A					
3	ARYA MURUGAN DM					
4	ASWIN VENU M					
5	FAYAS SHAJI RAHMAN					
6	FAZEELA S					
7	GOURI T SUGATHAN					
8	J AAYISHA					
9	MEGHA M					
10	MOHAMMAD FAYAZ					
11	MOHAMMED ABBAS N					
12	MUHAMMED AJMAL R S					
13	NAVAMI KRISHNA S					
14	NIHAL NAJEEB					
15	NITHIN V					
16	PARVATHY G.M					
17	SARITHA S L					
18	SHIJIN CLIVE					
19	SHILPA MANOHAR					
20	SREEJITH RAJ S					
21	SULEKHA S					



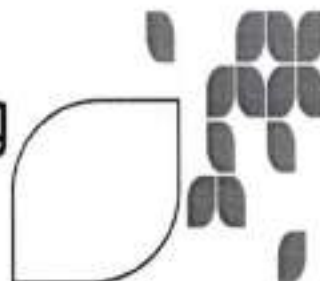
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Department of Electrical and Electronics Engineering			
Students Course Completion list			
EEE21001: COURSE ON INTRODUCTION TO ARDUINO			
Academic Year 2021-2022			
Sl No	Register Number	Name of Student	Completed
1	ACE19EE002	AKHIL S	✓
2	ACE19EE003	ANANDU A	✓
3	ACE19EE004	ARYA MURUGAN DM	✓
4	ACE19EE005	ASWIN VENU M	✓
5	ACE19EE007	FAYAS SHAJI RAHMAN	✓
6	ACE19EE008	FAZEELA S	✓
7	ACE19EE009	GOURI T SUGATHAN	✓
8	ACE19EE011	J AAYISHA	✓
9	ACE19EE012	MEGHA M	✓
10	ACE19EE013	MOHAMMAD FAYAZ	✓
11	ACE19EE014	MOHAMMED ABBAS N	✓
12	ACE19EE015	MUHAMMED AJMAL R S	✓
13	ACE19EE016	NAVAMI KRISHNA S	✓
14	ACE19EE017	NIHAL NAJEEB MOHAMMED	✓
15	ACE19EE018	NITHIN V	✓
16	ACE19EE019	PARVATHY G.M	✓
17	ACE19EE020	SARITHA S L	✓
18	ACE19EE021	SHIJIN CLIVE	✓
19	ACE19EE022	SHILPA MANOHAR	✓
20	ACE19EE023	SREEJITH RAJ S	✓
21	ACE19EE024	SULEKHA S	✓



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ASSESSMENT QUESTIONS
EEE21001: COURSE ON INTRODUCTION TO ARDUINO
Academic Year: 2021-2022

(Each question carry one mark)

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6. What is the difference between an IDE and a compiler?
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Department of Electrical and Electronics Engineering			
Assessment Marks			
EEE21001: COURSE ON INTRODUCTION TO ARDUINO			
Academic Year 2021-2022			
Sl No	Register Number	Name of Student	Marks
1	ACE19EE002	AKHIL S	10
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20	ACE19EE023	SREEJITH RAJ S	9
21	ACE19EE024	SULEKHA S	10



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Time



Akhil S

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ASSESSMENT QUESTIONS
EEE21001: COURSE ON INTRODUCTION TO ARDUINO
Academic Year: 2021-2022

(Each question carry one mark)

10
10

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ARYA MURUGAN

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ASSESSMENT QUESTIONS
EEE21001: COURSE ON INTRODUCTION TO ARDUINO
Academic Year: 2021-2022

(Each question carry one mark)

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9/10

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
ASSESSMENT QUESTIONS
EEE21001: COURSE ON INTRODUCTION TO ARDUINO
Academic Year: 2021-2022

(Each question carry one mark)

Shylin Chie

8
10

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Sulekha S

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ASSESSMENT QUESTIONS
EEE21001: COURSE ON INTRODUCTION TO ARDUINO
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(Each question carry one mark)

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ASSESSMENT QUESTIONS
EEE21001: COURSE ON INTRODUCTION TO ARDUINO
Academic Year: 2021-2022

(Each question carry one mark)

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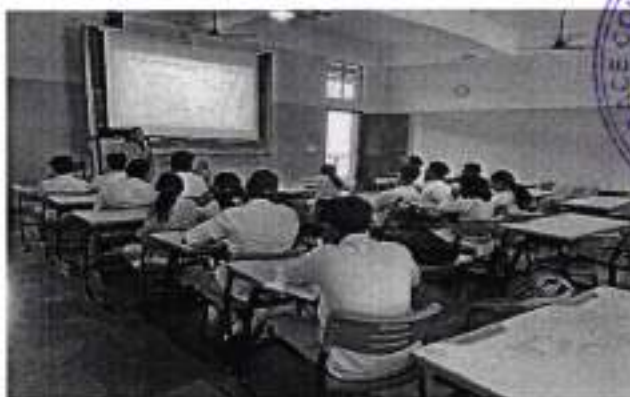
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Summary Report with Course Outcome 2021-2022

Course Name	Introduction to Arduino
Course Code	EEE21001
Course Duration	34 Hours
Year offered	2021-2022
Course Instructors	Mr. Vishakh Hariharan Assistant Professor, EEE
Course type	Self framed value added course

Course outcome

The students would be able to understand how the Arduino platform works in terms of the physical board and libraries and the IDE and to develop skills to design and implement various smart system applications.



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Assessment Mode

Attendance	35 Hrs
Number of Participants	21
Scheme of exam	Physical Answer sheet mode
Date of exam	10/12/2021

Time Patha
Course Coordinator

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Course Coordinator Report 2021 -2022

Course Name	Introduction to Arduino
Course Code	EEE21001
Course Duration	34 Hours
Year Offered	2021-2022
Course Coordinator	Mrs. Jimshitha E S
Course Type	Self framed value added course

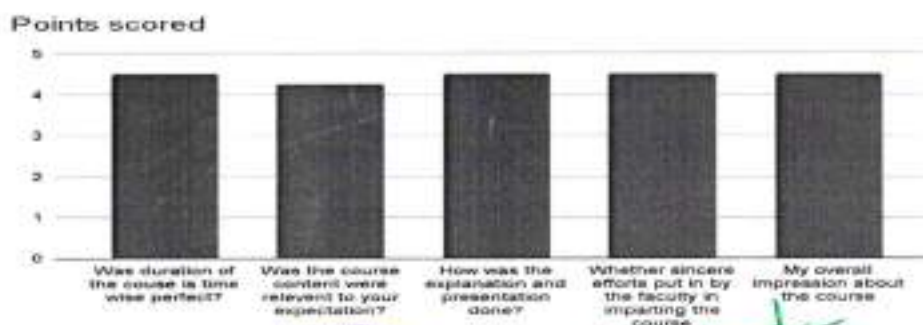
The Certificate program of Introduction to Arduino was conducted for the 3rd year Electrical and Electronics Engineering Students. The total period of 34Hrs has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled	21
Number of students Appeared	21
Scheme of exam	Physical Answer sheet mode
Date of exam	10/12/2021
Number of students Passed	21

Course Feedback :

The feedback was obtained from the participants after the end of the course and detailed analysis reports are Listed below.



Course Coordinator



Principal
ACE College of Engineering
Thiruvallam P.O
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OF ACHIEVEMENT

THIS CERTIFICATE IS PRESENTED TO

NITHIN V

of Third year EEE has undergone the training
programme on Introduction to Arduino during 06.12.2021 to
10.12.2021 organized by the Department of Electrical and
Electronics Engineering, ACE College of Engineering,
Trivandrum.


COORDINATOR




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COORDINATOR




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NAVAMI KRISHNA S

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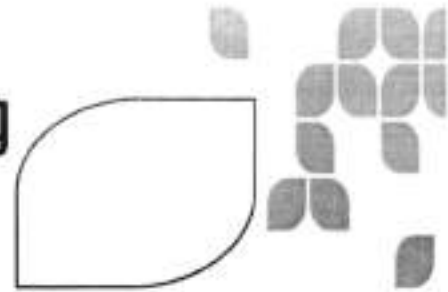

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From

Anuroopa A
Associate Professor & HOD
Department of Electrical and Electronics
ACE College of Engineering,
Thiruvananthapuram

Date: 25.04.2022

To

The Principal
ACE College of Engineering,
Thiruvananthapuram

Respected Sir,

Sub: Permission for Conducting Certificate Program - reg.

I am writing to request your permission to conduct an Add-on course on Accident Prevention and Risk Management in Electrical System for the students of I Year EEE. The course will be held from 9.05.2022 to 13.05.2022. Mrs. Jimshitha E S - Assistant Professor/EEE at ACE College of Engineering will be the coordinator of this program. I believe that the students will benefit from this program. The certificate will be provided by the department to each participant upon completion of the course. Kindly give our request a favorable consideration.

Your Faithfully


Anuroopa A




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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

CIRCULAR

Date: 27/04/2022

It is hereby informed to all the first year students of the Electrical and Electronics Department that we are conducting a 5 Days training program on Accident Prevention and Risk Management in Electrical System from 09/05/2022 to 13/05/2022 at Electrical Department. All students are cordially invited to register & attend the training program.


Coordinator


HoD




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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
EEE21002 Accident Prevention and Risk Management in Electrical System
ACADEMIC YEAR 2021-2022

COURSE CONTENT

Introduction To Electrical Safety, Shocks And Their Prevention (1 hr)

Objectives and principles of electrical safety (1 hr)

Approaches to prevent Accidents (1 hr)

Shocks (1 hr)

Prevention of shocks (1 hr)

Medical analysis of electric shocks and its effects (1 hr)

Safety precautions against contact shocks, flash shocks, burns, residential buildings (1 hr)

Electrical Safety in Residential Installations (2 hrs)

Electrical Safety in Commercial Installations (2 hrs)

Electrical Safety in Agricultural Installations (3 hrs)

Electrical Safety during Installation (2 hrs)

Electrical Safety during Testing and Commissioning (2 hrs)

Electrical Safety during Operation and Maintenance (3 hrs)

Electrical Safety in Hazardous Areas (1 hr)

Hazardous zones (1 hr)

Specifications of electrical plants (2 hr)

Equipment for hazardous locations (1 hr)

Classification of equipment enclosure for various hazardous gases and vapours (1 hr)

Classification of equipment/enclosure for hazardous locations (1 hr)

Fire Extinguishers (1 hr)



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Initiation of fires, types (1 hr)

Extinguishing techniques (1 hr)

Prevention of fire (1 hr)

Types of fire extinguishers (1 hr)

Course Coordinator

HOD

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RESOURCE PERSON PROFILE

Remanikanth S

Assistant Professor

Dept of Electrical and Electronics Engineering

ACE College of Engineering, Thiruvallom

Qualification:

- Bachelor of Technology in Electrical and Electronics Engineering from College of Engineering Munnar
- M Tech in Power Electronics and Drives from Government College of Engineering Tirunelveli Anna University

Publications:

- Hybrid power generation using dual axis solar tracking system and wind energy system
- Immuno Antichemo Nanorobotic Treatment
- Survey on smart grid: Challenges and Solution
- Digitally Controlled switch mode power Supply Based on matrix converter using intelligent controller PEDC 13
- Digitally Controlled switch mode power Supply Based on matrix converter using Neuro / Fuzzy controller NACCEPA 2k13

Achievements:

- Life time member in "The Indian Society for Technical Education" LM 120580
- Guest lecturer in youtube channels eMeryt Plus , Centre C Electrical
- Teaching experience in Electrical and Electronics Engineering of 10 years



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DAY/ PERIOD	1	2	T E A C H E R E A K	3	4	L U N C H B R E A K	5	6	7
09/05/2022	Introduction To Electrical Safety, Shocks And Their Prevention	Objectives and principles		Approaches to prevent Accidents	Shocks		Prevention of shocks	Medical analysis of electric shocks and its effects	Safety precautions against contact shocks, flash shocks, burns, residential buildings
10/05/2022	Electrical Safety in Residential Installations			Electrical Safety in Commercial Installations			Electrical Safety in Agricultural Installations		
11/05/2022	Electrical Safety during Installation			Electrical Safety during Testing and Commissioning			Electrical Safety during Operation and Maintenance		
12/05/2022	Electrical Safety in Hazardous Areas	Hazardous zones		Specifications of electrical plants			Equipment for hazardous locations	Classification of equipment enclosure for various hazardous gases and vapours	Classification of equipment/enclosure for hazardous locations
13/05/2022	Fire Extinguishers	Initiation of fires, types		Extinguishing techniques	Prevention of fire		Types of fire extinguishers	EXAM	FEEDBACK

Signature



Signature

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Accident Prevention and Risk Management in Electrical System

Department of
Electrical & Electronics
Engineering

Duration: 09/05/2022 – 13/05/2022

Resource Person
Mr. Remanikanth S

Coordinator
(Assistant Professor)
Mrs. Jimshitha E S



Convener (HOD)
Anuroopa A

Patron
Dr. Farrukh Sayeed
Principal



Farrukh Sayeed
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Department of Electrical and Electronics Engineering			
Enrolled Students List			
EEE21002 Accident Prevention and Risk Management in Electrical System			
Academic Year 2021-2022			
Sl No	Register Number	Name of Student	Signature
1	ACE21EE001	ABHINANDH MS	
2	ACE21EE002	AJOBIN R G	
3	ACE21EE003	AMAL RAJ R S	
4	ACE21EE004	ANFAZ AZLAM S	
5	ACE21EE005	ARIF MUHAMMED C A	
6	ACE21EE006	DEVIKA S S	
7	ACE21EE007	ENOSH S CLEETUS	
8	ACE21EE008	GAUTHAM NAIR M	
9	ACE21EE009	MOHAMMED ADIL	
10	ACE21EE010	MOHAMMED HAFIS H	
11	ACE21EE011	MUHAMMED FINZER	
12	ACE21EE012	SAJIN S S	
13	ACE21EE013	SATHEESH CHANDRAN	
14	ACE21EE014	SIVASREEDHAR M P	
15	ACE21EE015	SIYAD SHARAFUDEEN	
16	ACE21EE017	SUMESH R SURESH	

Time & Date



Sayed

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ACADEMIC YEAR 2021-2022

EEE21002 Accident Prevention and Risk Management in Electrical System

ATTENDANCE SHEET

Sl No	Name of Student	09/05/2022	10/05/2022	11/05/2022	12/05/2022	13/05/2022
1	ABHINANDH MS	<i>a</i>	<i>Abhinandh</i>	<i>Abhinandh</i>	<i>Abhinandh</i>	<i>Abhinandh</i>
2	AJOBIN R G	<i>Ajobin</i>	<i>Ajobin</i>	<i>Ajobin</i>	<i>Ajobin</i>	<i>Ajobin</i>
3	AMAL RAJ R S	<i>Amal</i>	<i>Amal</i>	<i>Amal</i>	<i>Amal</i>	<i>Amal</i>
4	ANFAZ AZLAM S	<i>Anfaz</i>	<i>Anfaz</i>	<i>Anfaz</i>	<i>Anfaz</i>	<i>Anfaz</i>
5	ARIF MUHAMMED C A	<i>Arif</i>	<i>Arif</i>	<i>Arif</i>	<i>Arif</i>	<i>Arif</i>
6	DEVIKA S S	<i>Devika</i>	<i>Devika</i>	<i>Devika</i>	<i>Devika</i>	<i>Devika</i>
7	ENOSH S CLEETUS	<i>Enosh</i>	<i>Enosh</i>	<i>Enosh</i>	<i>Enosh</i>	<i>Enosh</i>
8	GAUTHAM NAIR M	<i>Gautham</i>	<i>Gautham</i>	<i>Gautham</i>	<i>Gautham</i>	<i>Gautham</i>
9	MOHAMMED ADIL	<i>Adil</i>	<i>Adil</i>	<i>Adil</i>	<i>Adil</i>	<i>Adil</i>
10	MOHAMMED HAFIS H	<i>Hafis</i>	<i>Hafis</i>	<i>Hafis</i>	<i>Hafis</i>	<i>Hafis</i>
11	MUHAMMED FINZER	<i>Finzer</i>	<i>Finzer</i>	<i>Finzer</i>	<i>Finzer</i>	<i>Finzer</i>
12	SAJIN S S	<i>Sajin</i>	<i>Sajin</i>	<i>Sajin</i>	<i>Sajin</i>	<i>Sajin</i>
13	SATHEESH CHANDRAN	<i>Satheesh</i>	<i>Satheesh</i>	<i>Satheesh</i>	<i>Satheesh</i>	<i>Satheesh</i>
14	SIVASREEDHAR M P	<i>Sivas</i>	<i>Sivas</i>	<i>Sivas</i>	<i>Sivas</i>	<i>Sivas</i>
15	SIYAD SHARAFUDEEN	<i>Siyaad</i>	<i>Siyaad</i>	<i>Siyaad</i>	<i>Siyaad</i>	<i>Siyaad</i>
16	SUMESH R SURESH	<i>Sumesh</i>	<i>Sumesh</i>	<i>Sumesh</i>	<i>Sumesh</i>	<i>Sumesh</i>

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Sajin



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ASSESSMENT QUESTIONS

EEE21002 Accident Prevention and Risk Management in Electrical System Academic Year: 2021-2022

(Each question carry one mark)

1. When someone asks you for a 10 lb. fire extinguisher, what does the 10 lbs. represent?
 - A) The weight of the agent inside the fire extinguisher
 - B) The entire weight of the fire extinguisher
 - C) The weight of the fire extinguisher minus the weight of the agent
 - D) The weight of the fire it can exterminate
2. How far away should you stand when you are using a fire extinguisher to put out a fire?
 - A) 4 feet
 - B) 6 feet
 - C) 8 feet
 - D) 10 feet
3. The best or safest form of electrical shock is _____.
 - A) freezing
 - B) safety
 - C) awareness
 - D) no shock at all
4. The _____ within an electrical circuit is commonly referred to as the circuit voltage.
 - A) potential difference
 - B) Either potential or potential difference
 - C) potential
 - D) potential summation
5. The operating voltage of the equipment you are working with determines the _____ voltage; or within the building, the _____ voltage.
 - A) distribution; circuit
 - B) circuit; circuit
 - C) distribution; distribution
 - D) circuit; distribution




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6. You should always turn off or remove all power _____ making alterations to an electrical circuit.

- A) after
- B) either before or after
- C) before
- D) none of the above

7. The forced flow or movement of the electrons is described as the electrical _____.

- A) impedance
- B) current
- C) wattage
- D) voltage

8. During a severe electrical shock, _____ burns are normally caused by contact with the superheated air or surrounding metals of an arcing fault.

- A) Arc
- B) Electrical
- C) All of The answers
- D) thermal-contact

9. _____ burns occur when current flows along the skin or within the body (most dangerous).

- A) Fire
- B) none of the answers
- C) Electrical
- D) Either electrical or fire

10. Because current will take every available path back to its source, (this is where the danger of electrical shock enters the picture), the circuit conductors must be _____ to form a single path for current flow.

- A) isolated
- B) inoculated
- C) elevated
- D) insulated



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Department of Electrical and Electronics Engineering			
Assessment Marks			
EEE21002 Accident Prevention and Risk Management in Electrical System			
Academic Year 2021-2022			
Sl No	Register Number	Name of Student	Marks
1	ACE21EE001	ABHINANDH MS	8
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14	ACE21EE014	SIVASREEDHAR M P	9
15	ACE21EE015	SIYAD SHARAFUDEEN	10
16	ACE21EE017	SUMESH R SURESH	10

Time

Sujat

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ASSESSMENT QUESTIONS

EEE21002 Accident Prevention and Risk Management in Electrical System

Academic Year: 2021-2022

(Each question carry one mark)

- Ajobin RS

1. When someone asks you for a 10 lb. fire extinguisher, what does the 10 lbs. represent?
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 - ☐ C) distribution; distribution
 - ☒ D) circuit; distribution



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6. You should always turn off or remove all power _____ making alterations to an electrical circuit.

- A) after
- B) either before or after
- ☒ C) before
- D) none of the above



7. The forced flow or movement of the electrons is described as the electrical _____.

- A) impedance
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- D) voltage



8. During a severe electrical shock, _____ burns are normally caused by contact with the superheated air or surrounding metals of an arcing fault.

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- D) thermal-contact



9. _____ burns occur when current flows along the skin or within the body (most dangerous).

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10. Because current will take every available path back to its source, (this is where the danger of electrical shock enters the picture), the circuit conductors must be _____ to form a single path for current flow.

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ASSESSMENT QUESTIONS

EEE21002 Accident Prevention and Risk Management in Electrical System

Academic Year: 2021-2022

9/10

(Each question carry one mark)

Ans Muhammed C A

1. When someone asks you for a 10 lb. fire extinguisher, what does the 10 lbs. represent?

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- ☐ B) circuit; circuit
- ☐ C) distribution; distribution
- ☒ D) circuit; distribution




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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ASSESSMENT QUESTIONS

EEE21002 Accident Prevention and Risk Management in Electrical System

Academic Year: 2021-2022

9/10

(Each question carry one mark)

Siva Sreedhar M ?

1. When someone asks you for a 10 lb. fire extinguisher, what does the 10 lbs. represent?

- A) The weight of the agent inside the fire extinguisher
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5. The operating voltage of the equipment you are working with determines the _____ voltage; or within the building, the _____ voltage.

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- B) circuit; circuit
- C) distribution; distribution
- D) circuit; distribution



Siva Sreedhar
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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ASSESSMENT QUESTIONS

EEE21002 Accident Prevention and Risk Management in Electrical System

Academic Year: 2021-2022

8/10

(Each question carry one mark)

MOHAMMED ADIL

1. When someone asks you for a 10 lb. fire extinguisher, what does the 10 lbs. represent?

- A) The weight of the agent inside the fire extinguisher
- B) The entire weight of the fire extinguisher
- C) The weight of the fire extinguisher minus the weight of the agent ✓
- D) The weight of the fire it can exterminate

2. How far away should you stand when you are using a fire extinguisher to put out a fire?

- A) 4 feet
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- D) 10 feet

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5. The operating voltage of the equipment you are working with determines the _____ voltage; or within the building, the _____ voltage.

- A) distribution; circuit
- B) circuit; circuit
- C) distribution; distribution ✓
- D) circuit; distribution



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- ☒ C) All of The answers
- D) thermal-contact

9. _____ burns occur when current flows along the skin or within the body (most dangerous).

- A) Fire
- B) none of the answers
- ☒ C) Electrical
- D) Either electrical or fire

10. Because current will take every available path back to its source, (this is where the danger of electrical shock enters the picture), the circuit conductors must be _____ to form a single path for current flow.

- A) isolated
- B) inoculated
- C) elevated
- ☒ D) insulated



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING ASSESSMENT QUESTIONS

EEE21002 Accident Prevention and Risk Management in Electrical System

Academic Year: 2021-2022

7/10

(Each question carry one mark)

Ansal Raj R S

1. When someone asks you for a 10 lb. fire extinguisher, what does the 10 lbs. represent?

- A) The weight of the agent inside the fire extinguisher
- B) The entire weight of the fire extinguisher
- C) The weight of the fire extinguisher minus the weight of the agent
- ☒ D) The weight of the fire it can exterminate

2. How far away should you stand when you are using a fire extinguisher to put out a fire?

- A) 4 feet
- B) 6 feet
- ☒ C) 8 feet
- D) 10 feet

3. The best or safest form of electrical shock is _____

- A) freezing
- B) safety
- C) awareness
- ☒ D) no shock at all

4. The _____ within an electrical circuit is commonly referred to as the circuit voltage.

- ☒ A) potential difference
- B) Either potential or potential difference
- C) potential
- D) potential summation

5. The operating voltage of the equipment you are working with determines the _____ voltage; or within the building, the _____ voltage.

- A) distribution; circuit
- B) circuit; circuit
- ☒ C) distribution; distribution
- D) circuit; distribution



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6. You should always turn off or remove all power _____ making alterations to an electrical circuit.

- A) after
- B) either before or after
- C) before
- ☒ D) none of the above

7. The forced flow or movement of the electrons is described as the electrical _____.

- A) impedance
- ☒ B) current
- C) wattage
- D) voltage

8. During a severe electrical shock, _____ burns are normally caused by contact with the superheated air or surrounding metals of an arcing fault.

- ☒ A) Arc
- B) Electrical
- C) All of The answers
- D) thermal-contact

9. _____ burns occur when current flows along the skin or within the body (most dangerous).

- A) Fire
- B) none of the answers
- ☒ C) Electrical
- D) Either electrical or fire

10. Because current will take every available path back to its source, (this is where the danger of electrical shock enters the picture), the circuit conductors must be _____ to form a single path for current flow.

- A) isolated
- B) inoculated
- C) elevated
- ☒ D) insulated




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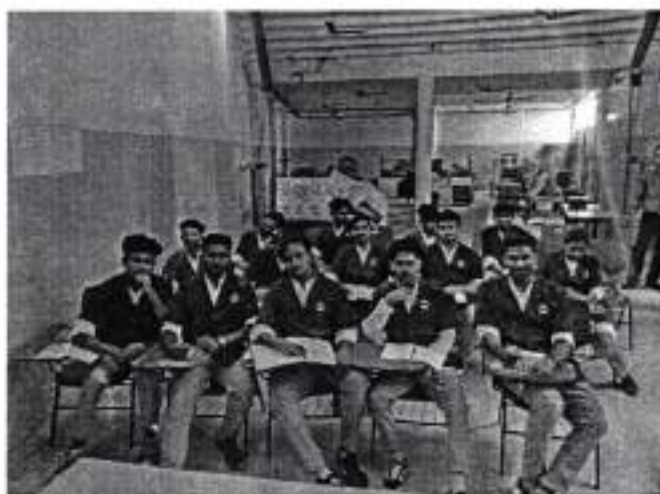
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Summary Report with Course Outcome 2021-2022

Course Name	Accident Prevention and Risk Management in Electrical System
Course Code	EEE21002
Course Duration	33 Hours
Year offered	2021-2022
Course Instructors	Mr. Remanikanth S, Assistant Professor, EEE
Course type	Self framed value added course

Course outcome

The students would be able to outline the electrical safety during installation, testing and commissioning.



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Assessment Mode

Attendance	35 Hrs
Number of Participants	16
Scheme of exam	Physical Answer sheet mode
Date of exam	13/05/2022

Thiruvallam
Course Coordinator

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Course Coordinator Report 2021-2022

Course Name	Accident Prevention and Risk Management in Electrical System
Course Code	EEE21002
Course Duration	33 Hours
Year Offered	2021-2022
Course Coordinator	Mrs. Jimshitha E S
Course Type	Self framed value added course

The Certificate program of Electrical Safety was conducted for the 1st year Electrical and Electronics Engineering Students. The total period of 33 Hrs has been planned and executed as per the course plan.

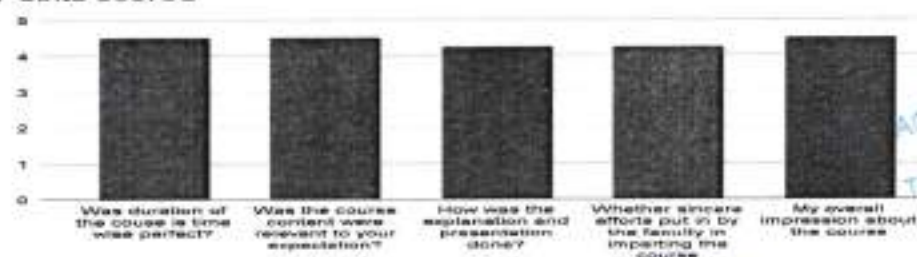
Assessment Mode

Number of students Enrolled	16
Number of students Appeared	16
Scheme of exam	Physical Answer sheet mode
Date of exam	13/05/2022
Number of students Passed	16

Course Feedback :

The feedback was obtained from the participants after the end of the course and detailed analysis reports are Listed below.

Points scored



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Signature
Course Coordinator



Signature
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Department of Electrical and Electronics
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CERTIFICATE
OF COMPLETION

This is to certify that ANFAZ AZLAM S

of FIRST YEAR EEE has undergone the training

programme on Accident Prevention and Risk Management in
Electrical System organized by the Department of Electrical
and Electronics Engineering, ACE College of Engineering,
Trivandrum on 09.05.2022 to 13.05.2022.


COORDINATOR


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Thiruvallam P.O.
Thiruvananthapuram-525 01



HOD

Department of Electrical and Electronics
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CERTIFICATE
OF COMPLETION

This is to certify that AMAL RAJ R S

of FIRST YEAR EEE has undergone the training

programme on Accident Prevention and Risk Management in
Electrical System organized by the Department of Electrical
and Electronics Engineering, ACE College of Engineering,
Trivandrum on 09.05.2022 to 13.05.2022



COORDINATOR



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Thiruvananthapuram-695 021



HOD

Department of Electrical and Electronics
Engineering
CERTIFICATE
OF COMPLETION

This is to certify that **SIYAD SHARAFUDEEN**

of **FIRST YEAR EEE** has undergone the training

programme on Accident Prevention and Risk Management in
Electrical System organized by the Department of Electrical
and Electronics Engineering, ACE College of Engineering,
Trivandrum on 09.05.2022 to 13.05.2022.


COORDINATOR


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Thiruvananthapuram-695 027




HOD

Department of Electrical and Electronics
Engineering
CERTIFICATE
OF COMPLETION

This is to certify that MUHAMMED FINZER

of FIRST YEAR EEE has undergone the training

programme on Accident Prevention and Risk Management in
Electrical System organized by the Department of Electrical
and Electronics Engineering, ACE College of Engineering,
Trivandrum on 09.05.2022 to 13.05.2022.


COORDINATOR


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Thiruvananthapuram-695 027




HOD

Department of Electrical and Electronics
Engineering
CERTIFICATE
OF COMPLETION

This is to certify that DEVIKA S S

of FIRST YEAR EEE has undergone the training

programme on Accident Prevention and Risk Management in
Electrical System organized by the Department of Electrical
and Electronics Engineering, ACE College of Engineering,
Trivandrum on 09.05.2022 to 13.05.2022


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From

Ms. Priya C V

HOD, Department of Civil Engineering,

ACE College of Engineering,

Trivandrum

To

The Principal

ACE College of Engineering,

Trivandrum

Respected Sir

Sub: Permission for conducting the workshop Reg:-

The Department of Civil Engineering is planning to conduct a 5 days' workshop on 'Revit architecture(CE21001)' for our third year students from 13/12/2021 to 17/12/2021 at ACE College of Engineering in association with CAD Desk. The certification will be given by the department itself. So, I kindly request you to grant permission for conducting the workshop.

Thanking You


Yours Sincerely

ACE TVM,
25/11/2021


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DEPARTMENT OF CIVIL ENGINEERING

Circular

Date: 3/12/2021

We are extremely happy to inform you that Department of Civil engineering will be conducting a 5 day (35 Hrs.) training program on 'Revit Architecture(CE21001)' for third year Civil Engineering students at CAAD Lab, ACE College of Engineering from 13/12/2021 to 17/12/2021. The certification will be issued by the department. Students are requested to register and attend the program. Fullest cooperation is solicited for the successful conduct of the training.


Course Coordinator


HOD



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DEPARTMENT OF CIVIL ENGINEERING Course Content for Revit Architecture(CE 21001)

Academic Year: 2021-22

COURSE CONTENT

- IntroductionProject Units, Levels & Walls (2 hrs)
- Modifying Tools
Doors, Windows, Floor, Column & Roofs (2 hrs)
- Components, Model in Place (3 hrs)
- Wall types, Stacked wall, Curtain walls (2 hrs)
- Wall Opening, Vertical opening (2 hrs)
- Stairs, Ramps & Railing (3 hrs)
- Massing, Creating Forms, Toposurface & Site Components (2 hrs)
- Materials, Lights, Camera & Rendering (2 hrs)
- Dimension, Area, Room & Room Separator (3 hrs)
- Section, Callout, Elevation, Drafting Views & Duplicate Views (2 hrs)
- Family Creation(1 hrs)
- Site Design, Walkthrough (2 hrs)
- Link Revit, Workshare, Import CAD & Decal (3 hrs)
- Detail Line, Color Fill Legends, Text, Model Text & Region (2 hrs)
- Schedule/Quantities & Material Takeoff (2 hrs)
- Sheets & Printing (1 hrs)
- Project (1 hrs)

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A

Resource Person : Mr. Rajesh is one of the software instructors in CAD Desk, with eminent knowledge about all the civil engineering softwares. CAD DESK is the leading software training institute in India, which offers vast range of courses in the fields of CAD, CAM and CAE. CAD DESK is the Authorized Training Partner of Autodesk, PTC, Bentley Systems and Dassault Systemes

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DEPARTMENT OF CIVIL ENGINEERING

Timetable for Revit Architecture(CE21001)

Academic Year: 2021-22

Date : 09/12/2021

DAY/ PERIOD	1	2	Break	3	4	Lunch Break	5	6	7		
	8.30am- 9.30am	9.30am- 10.30am			10.45am- 11.35am		11.35am- 12.25pm		1.20pm- 2.15pm	2.15pm- 3.10pm	3.15pm- 4.05pm
13/12/2021	IntroductionProject Units, Levels & Walls (Section 1)			Modifying Tools (Section 1)			Components, Model in Place (Section 1)				
14/12/2021	Wall types, Stacked wall, Curtain walls (Section 2)			Wall Opening, Vertical opening (Section 2)			Stairs, Ramps & Railing (Section 2)				
15/12/2021	Massing, Creating Forms, Toposurface & Site Components (Section 3)			Materials, Lights, Camera & Rendering (Section 3)			Dimension, Area, Room & Room Separator (Section 3)				
16/12/2021	Section, Callout, Elevation, Drafting Views & Duplicate Views (Section 4)			Family Creation, Site Design, Walkthrough (Section 4)			Link Revit, Workshare, Import CAD & Decal (Section 4)				
17/12/2021	Detail Line, Color Fill Legends, Text, Model Text & Region(Section 5)		Schedule/Quantities & Material Takeoff (Section 5)		Sheets & Printing, Project (Section 5)			Feed back			

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Workshop on

Revit Architecture

Department of
Civil Engineering

Duration: 13/12/2021 - 17/12/2021

Resource person

CAD Desk

21-22


Convener (HOD)

Priya C. V

Coordinator
(Assistant Professor)

Jisha G S

Patron

Dr. Farrukh Sayeed
Principal



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DEPARTMENT OF CIVIL ENGINEERING

Enrolled Students List for Revit Architecture (CE21001)

Academic Year: 2021-22

Date: 10/12/2021

Sl. No.	Register Number	Candidate Name	Signature
1.	ACE19CE001	ABHINAV VINOD	
2.	ACE19CE002	ADHILA SHAKKEER	
3.	ACE19CE003	AFRIN A	
4.	ACE19CE004	ALEEM MUHAMMED A	
5.	ACE19CE005	AMUDA U S	
6.	ACE19CE006	ANOOP S S	
7.	ACE19CE007	ARJUN SANAL	
8.	ACE19CE008	ARYA A K	
9.	ACE19CE010	ASHISH GEORGE	
10.	ACE19CE011	ASWAN J M	
11.	ACE19CE013	ASWIN KRISHNAN A S	
12.	ACE19CE014	ATHIRA S	
13.	ACE19CE016	GOKUL A	
14.	ACE19CE017	HARIKES M	
15.	ACE19CE018	KAMAL S BABU	
16.	ACE19CE019	KRISHNAPRIYA M	
17.	ACE19CE020	KRISHNARAJ R S	
18.	ACE19CE022	MUHAMMED FARHAN F	
19.	ACE19CE023	MUHAMMED SAAD A	
20.	ACE19CE024	MUHZIN N	

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21.	ACE19CE026	NIKHIL S	<i>Nikhil</i>
22.	ACE19CE027	NITHIN KRISHNA S	<i>Nithin</i>
23.	ACE19CE028	POOJA J S	<i>Pooja</i>
24.	ACE19CE029	SARANYA M B	<i>Sarany</i>
25.	ACE19CE030	SOORAJ R SURESH	<i>Sooraj</i>
26.	ACE19CE031	SREELAKSHMI P S	<i>Sreelakshmi</i>

Sl. No.	Register Number	Candidate Name	Signature
27.	ACE19CE032	SREE SIVAHARI R S	<i>Sree</i>
28.	ACE19CE033	S R HAREESH NATH	<i>SR</i>
29.	ACE19CE034	SUJIN S	<i>Sujin</i>
30.	ACE19CE036	SWAYA S BRIGHT	<i>Swaya</i>
31.	ACE19CE037	TEENA STEPHEN	<i>Teena</i>
32.	ACE19CE038	VISWAJITH S B	<i>Viswajith</i>
33.	ACE19CE039	VIVEK R S	<i>Vivek</i>

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DEPARTMENT OF CIVIL ENGINEERING

Attendance Sheet for Revit Architecture(CE21001)

Academic Year: 2021-22

Course from 13/12/2021 to 17/12/2021

Sl. No.	Student Name	Kindly Sign Against your Name				
		13/12/2021	14/12/2021	15/12/2021	16/12/2021	17/12/2021
1.	ABHINAV VINOD					
2.	ADHILA SHAKKEER					
3.	AFRIN A					
4.	ALEEM MUHAMMED A					
5.	AMUDA U S					
6.	ANOOP S S					
7.	ARJUN SANAL					
8.	ARYA A K					
9.	ASHISH GEORGE					
10.	ASWAN J M					
11.	ASWIN KRISHNAN A S					
12.	ATHIRA S					
13.	GOKUL A					
14.	HARIKES M					
15.	KAMAL S BABU					
16.	KRISHNAPRIYA M					
17.	KRISHNARAJ R S					
18.	MUHAMMED FARHAN F					
19.	MUHAMMED SAAD A					

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20.	MUHZIN N	<i>Muhs</i>	<i>Muhs</i>	<i>Muhs</i>	<i>Muhs</i>	<i>Muhs</i>
21.	NIKHIL S	<i>Nikhil</i>	<i>Nikhil</i>	<i>Nikhil</i>	<i>Nikhil</i>	<i>Nikhil</i>
22.	NITHIN KRISHNA S	<i>Nithin</i>	<i>Nithin</i>	<i>Nithin</i>	<i>Nithin</i>	<i>Nithin</i>
23.	POOJA J S	<i>Pooja</i>	<i>Pooja</i>	<i>Pooja</i>	<i>Pooja</i>	<i>Pooja</i>
24.	SARANYA M B	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>
25.	SOORAJ R SURESH	<i>Sooraj</i>	<i>Sooraj</i>	<i>Sooraj</i>	<i>Sooraj</i>	<i>Sooraj</i>

Sl. No.	Student Name	Kindly Sign Against your Name				
		13/12/2021	14/12/2021	15/12/2021	16/12/2021	17/12/2021
26.	SREELAKSHMI P S	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>	<i>S</i>
27.	SREE SIVAHARI R S	<i>Sree Sivah</i>	<i>Sree Sivah</i>	<i>Sree Sivah</i>	<i>Sree Sivah</i>	<i>Sree Sivah</i>
28.	S R HAREESH NATH	<i>SR</i>	<i>SR</i>	<i>SR</i>	<i>SR</i>	<i>SR</i>
29.	SUJIN S	<i>Sujin</i>	<i>Sujin</i>	<i>Sujin</i>	<i>Sujin</i>	<i>Sujin</i>
30.	SWAYA S BRIGHT	<i>Swaya</i>	<i>Swaya</i>	<i>Swaya</i>	<i>Swaya</i>	<i>Swaya</i>
31.	TEENA STEPHEN	<i>Teena</i>	<i>Teena</i>	<i>Teena</i>	<i>Teena</i>	<i>Teena</i>
32.	VISWAJITH S B	<i>Viswajith</i>	<i>Viswajith</i>	<i>Viswajith</i>	<i>Viswajith</i>	<i>Viswajith</i>
33.	VIVEK R S	<i>Vivek</i>	<i>Vivek</i>	<i>Vivek</i>	<i>Vivek</i>	<i>Vivek</i>

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DEPARTMENT OF CIVIL ENGINEERING

Course Completion Students List for Revit Architecture (CE21001)

Academic Year: 2021-22

Date: 10/12/2021

Sl. No.	Register Number	Candidate Name	Course Completed
1.	ACE19CE001	ABHINAV VINOD	✓
2.	ACE19CE002	ADHILA SHAKKEER	✓
3.	ACE19CE003	AFRIN A	✓
4.	ACE19CE004	ALEEM MUHAMMED A	✓
5.	ACE19CE005	AMUDA U S	✓
6.	ACE19CE006	ANOOP S S	✓
7.	ACE19CE007	ARJUN SANAL	✓
8.	ACE19CE008	ARYA A K	✓
9.	ACE19CE010	ASHISH GEORGE	✓
10.	ACE19CE011	ASWAN J M	✓
11.	ACE19CE013	ASWIN KRISHNAN A S	✓
12.	ACE19CE014	ATHIRA S	✓
13.	ACE19CE016	GOKUL A	✓
14.	ACE19CE017	HARIKES M	✓
15.	ACE19CE018	KAMAL S BABU	✓
16.	ACE19CE019	KRISHNAPRIYA M	✓
17.	ACE19CE020	KRISHNARAJ R S	✓
18.	ACE19CE022	MUHAMMED FARHAN F	✓
19.	ACE19CE023	MUHAMMED SAAD A	✓



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20.	ACE19CE024	MUHZIN N	✓
21.	ACE19CE026	NIKHIL S	✓
22.	ACE19CE027	NITHIN KRISHNA S	✓
23.	ACE19CE028	POOJA J S	✓
24.	ACE19CE029	SARANYA M B	✓
25.	ACE19CE030	SOORAJ R SURESH	✓
26.	ACE19CE031	SREELAKSHMI P S	✓

Sl. No.	Register Number	Candidate Name	Course Completed
27.	ACE19CE032	SREE SIVAHARI R S	✓
28.	ACE19CE033	S R HAREESH NATH	✓
29.	ACE19CE034	SUJIN S	✓
30.	ACE19CE036	SWAYA S BRIGHT	✓
31.	ACE19CE037	TEENA STEPHEN	✓
32.	ACE19CE038	VISWAJITH S B	✓
33.	ACE19CE039	VIVEK R S	✓

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DEPARTMENT OF CIVIL ENGINEERING

Assessment marks for Revit Architecture(CE21001)

Academic Year: 2021-22

Date: 6/01/2022

Sl. No.	Register Number	Candidate Name	Marks (20)
1.	ACE19CE001	ABHINAV VINOD	20
2.	ACE19CE002	ADHILA SHAKKEER	20
3.	ACE19CE003	AFRIN A	18
4.	ACE19CE004	ALEEM MUHAMMED A	18
5.	ACE19CE005	AMUDA U S	20
6.	ACE19CE006	ANOOP S S	20
7.	ACE19CE007	ARJUN SANAL	18
8.	ACE19CE008	ARYA A K	20
9.	ACE19CE010	ASHISH GEORGE	20
10.	ACE19CE011	ASWAN J M	20
11.	ACE19CE013	ASWIN KRISHNAN A S	18
12.	ACE19CE014	ATHIRA S	20
13.	ACE19CE016	GOKUL A	20
14.	ACE19CE017	HARIKES M	20
15.	ACE19CE018	KAMAL S BABU	18
16.	ACE19CE019	KRISHNAPRIYA M	20
17.	ACE19CE020	KRISHNARAJ R S	20
18.	ACE19CE022	MUHAMMED FARHAN F	20
19.	ACE19CE023	MUHAMMED SAAD A	18
20.	ACE19CE024	MUHZIN N	18

Signed

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ACE College of Engineering
Thiruvankuppil Thiruvananthapuram-695027

Prasanth
6/1/2022



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21.	ACE19CE026	NIKHIL S	20
22.	ACE19CE027	NITHIN KRISHNA S	20
23.	ACE19CE028	POOJA J S	20
24.	ACE19CE029	SARANYA M B	20
25.	ACE19CE030	SOORAJ R SURESH	20
26.	ACE19CE031	SREELAKSHMI P S	20

Sl. No.	Register Number	Candidate Name	Marks (20)
27.	ACE19CE032	SREE SIVAHARI R S	18
28.	ACE19CE033	S R HAREESH NATH	18
29.	ACE19CE034	SUJIN S	20
30.	ACE19CE036	SWAYA S BRIGHT	20
31.	ACE19CE037	TEENA STEPHEN	20
32.	ACE19CE038	VISWAJITH S B	18
33.	ACE19CE039	VIVEK R S	20

Prasanth
Cust. In-charge

Sayed
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Thiruvananthapuram-695027



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DEPARTMENT OF CIVIL ENGINEERING

Value Added Course Summary with Course Outcome Ac. Yr. 2021-2022

Course Name : Revit Architecture(CE21001)
Course Duration : 35 Hours
Year offered : Third Year CE Students
Course Instructors : Mr. Rajesh
CAD Desk

Course Outcome

The students would be able to create a unified model that all disciplines and trades can use to complete their work.

Course type : Self framed value added course

Assessment Mode

Attendance : 35 Hrs
Number of Participants : 33
Scheme of exam : Software
Date of exam : 04/01/2022

Glimpses



Students actively participating in the Revit Architecture course

Course Coordinator

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Thiruvananthapuram-695 027





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DEPARTMENT OF CIVIL ENGINEERING ENGINEERING Course Coordinator Report

Course Name : **Revit Architecture(CE21001)**
Course Duration : **35 Hours**
Year offered : **Third Year CE Students**
Course Coordinator : **Ms. Vindhuj VS**
Assistant Professor/ CE
Course type : **Self framed value added course**

The Certificate program of 'Revit Architecture' was conducted for the third year Civil Engineering students. The total period of 35 hrs has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled : 33
Number of students Appeared : 33
Scheme of exam : Software
Date of exam : 04/01/2022
Number of students Passed : 33

Course Feedback :

The feedback was obtained from the participants after end the course and detailed analysis report are Listed below.



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Course Coordinator

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PRINCIPAL
ACE College of Engineering
Thiruvallam P.O
Thiruvananthapuram-695 027



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HoD

Handwritten signature

CERTIFICATE

♦♦ This certificate is presented to ♦♦

ANOOP S S

Upon successful completion on training on Revit Architecture during 13-12-2021 to 17-12-2021 organized by Department of Civil Engineering, ACE College of Engineering, Thiruvallam


Principal
College of Engineering
Thiruvallam P.O.
Thiruvallur-695 027


Coordinator




HOD



CERTIFICATE

♦♦ This certificate is presented to ♦♦

GOKUL A

Upon successful completion on training on Revit Architecture during 13-12-2021 to 17-12-2021 organized by Department of Civil Engineering, ACE College of Engineering, Thiruvallam

Sayed

PRINCIPAL
College of Engineering
Thiruvallam P.O.
Thiruvallam - 686 027

Jashe
Coordinator



Sayed
HOD



CERTIFICATE

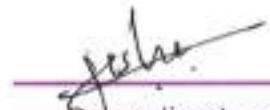
♦♦ This certificate is presented to ♦♦

ATHIRA S

Upon successful completion on training on Revit Architecture during 13-12-2021 to 17-12-2021 organized by Department of Civil Engineering, ACE College of Engineering, Thiruvallam



PRINCIPAL
ACE College of Engineering
Thiruvallam P.O
Thiruvallur District - 605 027


Coordinator




HOD



CERTIFICATE

♦♦ This certificate is presented to ♦♦

POOJA J S

Upon successful completion on training on Revit Architecture during 13-12-2021 to 17-12-2021 organized by Department of Civil Engineering, ACE College of Engineering, Thiruvallam



PRINCIPAL
ACE College of Engineering
Thiruvallam P.O.
Thiruvallur District - 601 307


Coordinator




HOD



CERTIFICATE

♦♦ This certificate is presented to ♦♦

SREELAKSHMI P S

Upon successful completion on training on Revit Architecture during 13-12-2021 to 17-12-2021 organized by Department of Civil Engineering, ACE College of Engineering, Thiruvallam



PRINCIPAL
ACE College of Engineering
Thiruvallam P.O.
Thiruvallam-625 027


Coordinator




HOD



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The Location for the college is near to the ACE College of Engineering, Trivandrum
+91 9711122222 / 81 197 | acecollege@ace.edu.in | www.acecollege.edu.in



From

Ms. Priya C V

HOD, Department of Civil Engineering,

ACE College of Engineering,

Trivandrum

To

The Principal

ACE College of Engineering,

Trivandrum

Respected Sir

Sub: Permission for conducting the workshop

The Department of Civil Engineering is planning to conduct a 5 days training programme on 'AutoCAD 3D(CE21002)' for our second year students from 04/01/2022 to 08/01/2022 at ACE College of Engineering in association with INTERCAD. The certification will be issued by the department itself. So, I kindly request you to grant permission for conducting the workshop.

Thanking You

ACE TVM,

21/12/2020



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DEPARTMENT OF CIVIL ENGINEERING

Circular

Date: 02/01/2022

We are extremely happy to inform that Department of Civil Engineering will be conducting 5 Days (34 Hrs.) training program on 'AutoCAD 3D(CE21002)' for second year Civil Engineering students at CADD Lab, ACE College of Engineering from 04/01/2022 to 08/01/2022 by Vindhuja V.S. The certification will be issued by ACE College of Engineering. Students are requested to register and attend the program. Fullest cooperation is solicited for the successful conduct of the training.



Course Coordinator



HoD



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DEPARTMENT OF CIVIL ENGINEERING Course Content for AutoCAD 3D(CE21002)

Academic Year: 2021-22

COURSE CONTENT

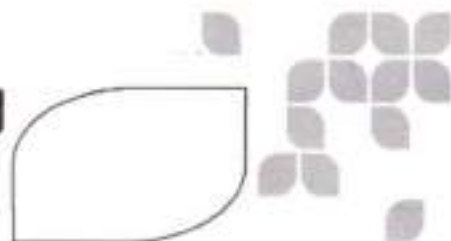
1. 3D viewing techniques (2 hrs)
2. Working with simple and composite solids (2 hrs)
3. Creating complex solids and surfaces (3 hrs)
4. Modifying objects in 3D space (2 hrs)
5. Editing solids (2 hrs)
6. Creating sections (2 hrs)
7. Camera perspectives, Animations (2 hrs)
8. Working with point clouds (2 hrs)
9. Converting 3D objects (2 hrs)
10. Setting up a rendering with materials and lights (3 hrs)
11. Creating 2D drawings from 3D models (2 hrs)
12. Working with the User Coordinate System (2 hrs)
13. Set up a drawing for 3D Prints (3 hrs)
14. Practice (5 hrs)

Resource Person : Ms. Anju is one of the software instructors in CAD Desk, with eminent knowledge about all the civil engineering softwares. CAD DESK is the leading software training institute in India, which offers vast range of courses in the fields of CAD, CAM and CAE. CAD DESK is the Authorized Training Partner of Autodesk, PTC, Bentley Systems and Dassault Systemes

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Thiruvallam P.O.
695 027



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Anju
C.E. 21002



DEPARTMENT OF CIVIL ENGINEERING

Timetable for AutoCad-3D(CE21002)

Academic Year: 2021-22

Date : 03/01/2022

DAY PERIOD	1	2	Break	3	4	Lunch Break	5	6	7		
	8.30am-9.30am	9.30am-10.30am			10.45am-11.35am		11.35am-2.25pm		1.20pm-2.15pm	2.15pm-3.10pm	3.15pm-4.05pm
04.01.2022	3D viewing techniques (Section 1)				Working with simple and composite solids (Section 1)			Creating complex solids and surfaces (Section 1)			
05.01.2022	Modifying objects in 3D space (Section 2)				Editing solids (Section 2)			Creating sections, camera perspectives, and animations (Section 2)			
06.01.2022	Working with point clouds (Section 3)				Converting 3D objects (Section 3)			Setting up a rendering with materials and lights (Section 3)			
07.01.2022	Creating 2D drawings from 3D models (Section 4)				Working with the User Coordinate System (Section 4)			Set up a drawing for 3D Prints(Section 4)			
08.01.2022	Practice (Section 5)				Practice(Section 5)			Practice (Section 5)		Feedback	

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Training Programme on
AutoCad 3D

Department of
Civil Engineering

Duration: 04/01/2021 – 08/01/2021

Resource Person

CAD Desk


Convener (HOD)
Priya C. V

Coordinator
(Assistant Professor)

Jisha G S

Patron
Dr. Farrukh Sayeed
Principal




Principal
ACE College of Engineering
Thiruvananthapuram
Tamil Nadu 695 027


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DEPARTMENT OF CIVIL ENGINEERING Enrolled Students List for AutoCAD 3D(CE21002)

Academic Year: 2021-22

Date: 04/01/2022

Sl. No.	Register Number	Candidate Name	Signature
1.	ACE20CE001	AADITHYAN S S	<i>AdD</i>
2.	ACE20CE002	ABDUL BASITH S	<i>Abdulla</i>
3.	ACE20CE003	ABDULLA SR	<i>A</i>
4.	ACE20CE004	ABHIJITH ASI	<i>Abhijith</i>
5.	ACE20CE005	ABHIJITH PRAKASH	<i>Abi P</i>
6.	ACE20CE006	ABHIRAMI M S	<i>Ab</i>
7.	ACE20CE007	ABHIYA AS	<i>Adhige</i>
8.	ACE20CE008	ABIN S B	<i>Ab</i>
9.	ACE20CE009	ABJIN B	<i>Ab</i>
10.	ACE20CE010	ADARSH M S	<i>Adarsh</i>
11.	ACE20CE011	AISWARYA C S	<i>Aiswarya</i>
12.	ACE20CE012	AITHEEHA SHARMA	<i>AS</i>
13.	ACE20CE013	AL AMEEN M	<i>Al</i>
14.	ACE20CE014	ALFIYA A	<i>Alfiya</i>
15.	ACE20CE016	ARATHY C S	<i>Arathy</i>
16.	ACE20CE017	ARUN ASHOK	<i>Arun</i>
17.	ACE20CE018	ASHNA M	<i>As</i>
18.	ACE20CE019	ASHNA SHAJIL	<i>A</i>
19.	ACE20CE021	ASWIN AJITH	<i>AS</i>
20.	ACE20CE022	BIBIN BIJU	<i>Bibin</i>

25/01/22
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21.	ACE20CE023	DARSHAN A S	<i>Darshan</i>
22.	ACE20CE024	HASNA LB	<i>Hasna</i>
23.	ACE20CE025	IJAS MUHAMMED M	<i>Ijas</i>
24.	ACE20CE026	JITHIN P M	<i>Jithin</i>
25.	ACE20CE028	MARIYAM S	<i>Mariya</i>
26.	ACE20CE029	MOHAMMED ABDUL KHADER M	<i>MAKH</i>

Sl. No.	Register Number	Candidate Name	Signature
27.	ACE20CE030	MOHAMMED FADHI FAIZEL	<i>Fadhi</i>
28.	ACE20CE031	MUHAMMEDH YASEEN H K	<i>Yaseen</i>
29.	ACE20CE032	NANDHA B S	<i>Nandha</i>
30.	ACE20CE033	NANDHU SIVARAM V	<i>Nandhu</i>
31.	ACE20CE034	NANDINI M G	<i>Nandini</i>
32.	ACE20CE035	NITHYA BIJU	<i>Nithya</i>
33.	ACE20CE036	RISHIKESH J S	<i>Rishi</i>
34.	ACE20CE037	SUBIN S S	<i>Subin</i>
35.	ACE20CE038	VINEETH E	<i>Vineeth</i>
36.	ACE20CE039	XAVIER J	<i>Xavier</i>

P. J. S.
Chairman

25/09/2020
ACE College of Engineering
Thiruvallam P.O.
Thiruvananthapuram-695027



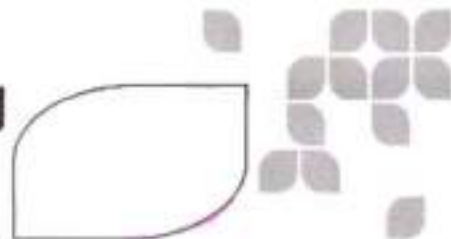
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DEPARTMENT OF CIVIL ENGINEERING Attendance Sheet for AutoCAD 3D(CE21002)

Academic Year: 2021-22

Course from 04/01/2022 to 08/01/2022

SL No.	Register Number	Candidate Name	04/01/22	05/01/22	06/01/22	07/01/22	08/01/22
1.	ACE20CE001	AADITHYAN S S	Aadithyan	Aadithya	Aadithy	Aadithye	Aadithy
2.	ACE20CE002	ABDUL BASITH S	Ab	Ab	Ab	Ab	Ab
3.	ACE20CE003	ABDULLA SR	Ab	Ab	Ab	Ab	Ab
4.	ACE20CE004	ABHIJITH ASI	Abhi	Abhi	Abhi	Abhi	Abhi
5.	ACE20CE005	ABHIJITH PRAKASH	Abijith	Abijith	Abijith	Abijith	Abijith
6.	ACE20CE006	ABHIRAMI M S	Ab	Ab	Ab	Ab	Ab
7.	ACE20CE007	ABHIYA AS	Ab	Ab	Ab	Ab	Ab
8.	ACE20CE008	ABIN S B	Ab	Ab	Ab	Ab	Ab
9.	ACE20CE009	ABJIN B	Abjin	Abjin	Abjin	Abjin	Abjin
10.	ACE20CE010	ADARSH M S	Adarsh	Adarsh	Adarsh	Adarsh	Adarsh
11.	ACE20CE011	AISWARYA C S	Ais	Ais	Ais	Ais	Ais
12.	ACE20CE012	AITHEEHA SHARMA	Aitheh	Aitheh	Aitheh	Aitheh	Aitheh
13.	ACE20CE013	AL AMEEN M	Al	Al	Al	Al	Al
14.	ACE20CE014	ALFIYA A	Alfi	Alfi	Alfi	Alfi	Alfi
15.	ACE20CE016	ARATHY C S	Arathy	Arathy	Arathy	Arathy	Arathy
16.	ACE20CE017	ARUN ASHOK	Arun	Arun	Arun	Arun	Arun
17.	ACE20CE018	ASHNA M	Ashna	Ashna	Ashna	Ashna	Ashna
18.	ACE20CE019	ASHNA SHAJIL	As	As	As	As	As
19.	ACE20CE021	ASWIN AJITH	Aswin	As	As	As	As
20.	ACE20CE022	BIBIN BIJU	Bibi	Bibi	Bibi	Bibi	Bibi

Signature
and Date



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21.	ACE20CE023	DARSHAN A S	<i>Dar</i>	<i>Da</i>	<i>D</i>	<i>D</i>	<i>D</i>
22.	ACE20CE024	HASNA LB	<i>Hasna</i>	<i>Hasna</i>	<i>Hasna</i>	<i>Hasna</i>	<i>Hasna</i>
23.	ACE20CE025	IJAS MUHAMMED M	<i>Ijas</i>	<i>Ijas</i>	<i>Ijas</i>	<i>Ijas</i>	<i>Ijas</i>
24.	ACE20CE026	JITHIN P M	<i>Jithin</i>	<i>Jithin</i>	<i>Jithin</i>	<i>Jithin</i>	<i>Jithin</i>
25.	ACE20CE028	MARIYAM S	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>
26.	ACE20CE029	MOHAMMED ABDUL KHADER M	<i>Ab</i>	<i>Ab</i>	<i>Ab</i>	<i>Ab</i>	<i>Ab</i>

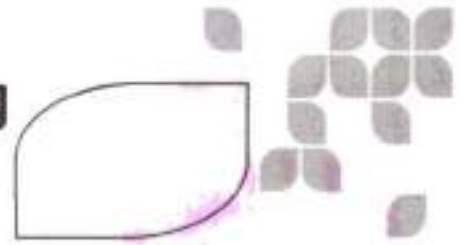
SL No.	Register Number	Candidate Name	04/01/22	05/01/22	06/01/22	07/01/22	08/01/22
27.	ACE20CE030	MOHAMMED FADHI FAIZEL	<i>Fadhi</i>	<i>Fadhi</i>	<i>Fadhi</i>	<i>Fadhi</i>	<i>Fadhi</i>
28.	ACE20CE031	MUHAMMEDH YASEEN H K	<i>Yaseen</i>	<i>Yaseen</i>	<i>Yaseen</i>	<i>Yaseen</i>	<i>Yaseen</i>
29.	ACE20CE032	NANDHA B S	<i>Nba</i>	<i>Nba</i>	<i>Nba</i>	<i>Nba</i>	<i>Nba</i>
30.	ACE20CE033	NANDHU SIVARAM V	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>
31.	ACE20CE034	NANDINI M G	<i>Nadhin</i>	<i>Nadhin</i>	<i>Nadhin</i>	<i>Nadhin</i>	<i>Nadhin</i>
32.	ACE20CE035	NITHYA BIJU	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>
33.	ACE20CE036	RISHIKESH J S	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>R</i>
34.	ACE20CE037	SUBIN S S	<i>Subin</i>	<i>Subin</i>	<i>Subin</i>	<i>Subin</i>	<i>Subin</i>
35.	ACE20CE038	VINEETH E	<i>V</i>	<i>V</i>	<i>V</i>	<i>V</i>	<i>V</i>
36.	ACE20CE039	XAVIER J	<i>Xavier</i>	<i>Xavier</i>	<i>Xavier</i>	<i>Xavier</i>	<i>Xavier</i>

Prasanth

Prasanth
Principal
ACE College of Engineering
Thiruvananthapuram - 555027



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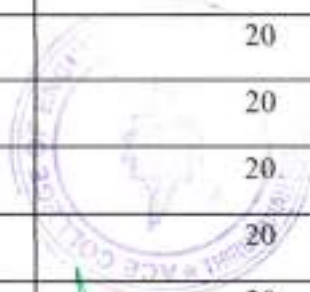


DEPARTMENT OF CIVIL ENGINEERING Assessment Marks for AutoCAD 3D(CE21002)

Academic Year: 2021-22

Date: 11/01/2022

Sl. No.	Register Number	Candidate Name	Marks out of 20
1.	ACE20CE001	AADITHYAN S S	20
2.	ACE20CE002	ABDUL BASITH S	20
3.	ACE20CE003	ABDULLA SR	18
4.	ACE20CE004	ABHIJITH ASI	18
5.	ACE20CE005	ABHIJITH PRAKASH	20
6.	ACE20CE006	ABHIRAMI M S	20
7.	ACE20CE007	ABHIYA AS	20
8.	ACE20CE008	ABIN S B	20
9.	ACE20CE009	ABJIN B	18
10.	ACE20CE010	ADARSH M S	20
11.	ACE20CE011	AISWARYA C S	20
12.	ACE20CE012	AITHEEHA SHARMA	20
13.	ACE20CE013	AL AMEEN M	20
14.	ACE20CE014	ALFIYA A	20
15.	ACE20CE016	ARATHY C S	20
16.	ACE20CE017	ARUN ASHOK	20
17.	ACE20CE018	ASHNA M	20
18.	ACE20CE019	ASHNA SHAJIL	20



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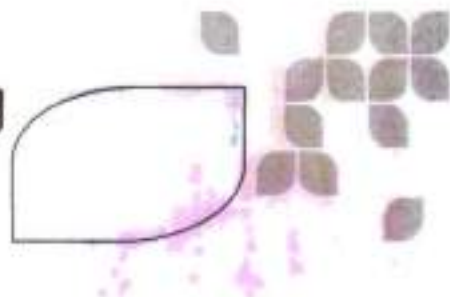
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19.	ACE20CE021	ASWIN AJITH	20
20.	ACE20CE022	BIBIN BIJU	18
21.	ACE20CE023	DARSHAN A S	18
22.	ACE20CE024	HASNA LB	18
23.	ACE20CE025	IJAS MUHAMMED M	20
24.	ACE20CE026	JITHIN P M	20
25.	ACE20CE028	MARIYAM S	20

Sl. No.	Register Number	Candidate Name	Marks out of 20
26.	ACE20CE029	MOHAMMED ABDUL KHADER M	18
27.	ACE20CE030	MOHAMMED FADHI FAIZEL	20
28.	ACE20CE031	MUHAMMED YASEEN H K	20
29.	ACE20CE032	NANDHA B S	20
30.	ACE20CE033	NANDHU SIVARAM V	20
31.	ACE20CE034	NANDINI M G	18
32.	ACE20CE035	NITHYA BIJU	18
33.	ACE20CE036	RISHIKESH J S	18
34.	ACE20CE037	SUBIN S S	20
35.	ACE20CE038	VINEETH E	20
36.	ACE20CE039	XAVIER J	20

Signature
Principal

Signature
Principal

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ACE COLLEGE OF ENGINEERING
THIRUVANANTHAPURAM-695027

Signature



DEPARTMENT OF CIVIL ENGINEERING

Value Added Course Summary with Course Outcome 2021-2022

Course Name	: AutoCAD 3D(CE21002)
Course Duration	: 34 Hours
Year offered	: Second Year CE Students- 2020-2024
Course Instructors	: Ms. Anju Intercads
Course type	: Self framed value added course

Course outcome

The course provides a thorough grounding in the fundamentals of 3D and explores the main features of the advanced 3D Modeling workspace in the AutoCAD software.

Assessment Mode	: Software
Attendance	: 34 Hrs
Number of Participants	: 36
Scheme of exam	: Software
Date of exam	: 08/01/2022

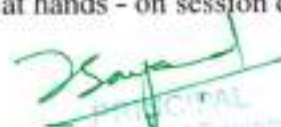
Glimpses



Students' interaction at hands - on session during AutoCAD course

Course Coordinator




 PRINCIPAL
 ACE College of Engineering
 Thiruvananthapuram P.O.
 Thiruvananthapuram-695 027



HoD






DEPARTMENT OF CIVIL ENGINEERING Course Coordinator Report 2021-2022

Course Name : AutoCAD 3D(CE21002)
Course Duration : 35 Hours
Year offered : Second Year CE Student
Course Coordinator : Ms.Jisha G S
 Assistant Professor/ CE
Course type : Self framed value added course

The Certificate program of 'AutoCAD 3D' was conducted for second year Civil Engineering students. The total period of 35 hrs has been planned and executed as per the course plan.

Assessment Mode

Number of students Enrolled : 36
 Number of students Appeared : 36
 Scheme of exam : Software
 Date of exam : 08/01/2022
 Number of students Passed : 36

Course Feedback :

The feedback was obtained from the participants after end the course and detailed analysis report are Listed below.

Course feedback



Jisha
 Course Coordinator

Sayed
 PRINCIPAL
 ACE College of Engineering
 Thiruvallam p.o. Thiruvananthapuram - 695027
 Phone: +91 471 711 7777



[Signature]
 HoD
[Signature]



CERTIFICATE OF COMPLETION

IS HEREBY GRANTED TO
ABHIYA A S

TO CERTIFY COMPLETION OF AUTO CAD 3D TRAINING FROM 04-01-2022
TO 08-01-2022 ORGANISED BY CIVIL ENGINEERING DEPARTMENT, ACE
COLLEGE OF ENGINEERING, THIRUVALLAM



John
Coordinator

[Signature]
HOD

Principal
ACE College of Engineering
Thiruvallam P.O.
Thiruvallam-689 027

[Signature]



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IS HEREBY GRANTED TO

DARSHAN A S

TO CERTIFY COMPLETION OF AUTO CAD 3D TRAINING FROM 04-01-2022
TO 08-01-2022 ORGANISED BY CIVIL ENGINEERING DEPARTMENT, ACE
COLLEGE OF ENGINEERING, THIRUVALLAM

Sayed
The Head of the Department
Civil Engineering
04/01/2022



John

Coordinator

Raj
HOD

OK



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ASWIN AJITH

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ACE College of Engineering
Thiruvallam P.O.
Thiruvananthapuram-695 027

Jesha

Coordinator

Sayed
HOD

th



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NANDINI M G

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Coordinator

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