

(An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

S.P.G.Chidambara Nadar - C.Nagammal Campus

S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

#### DEPARTMENT OF MECHCHANICAL ENGINEERING

# Value Added Course on HEATING VENTILATION & AIR CONDITIONING

Conducted: Excel MEP, Bangalore

Year / Sem Batch: III / VI / 2019 – 23

Course duration :28.03.2022 to 30.03.2022

Course Duration: 24 Hrs



S.RG.Chidambara Nadar - C. Nagammal Campus, S.RG.C. Nagar, K. Vellakulam - 625 701, Near VIRUDHUNAGAR, Madural District. Accredited by NAAC with 'A' Grade

. Submitted to the SECR	[1] - 1. 2 H.	20 B.
Book No. SL No. 96	MECH	Date 24.03
VALUE ADDED GURSE )	TIL YEAR - STUDEN	S HUAC COURSE
we are planned	to organize	a value added Course of 6
Name of the Course HVAC  NO of Student 62 no  Govern from 11.04	illoming & MED Cor	npony.
Name of the Course : HVAC	- Design.	185. J of 657
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round of. Ps 1,41,600/		
Signature of Faculty	HOD	PRINCIPAL
	OFFICE USE	
1) Budget allotted	· Value	Added
2) Amount committed / Spent sofar	Com	Lipense
3) Balance available		
		CAR
OM	Treasurer	

From: Madhan.N.R

**Sent:** 26 March 2022 13:23 **To:** MECH; SRI RAMA PRIYA.R.P **Cc:** PRITHIVIRAJ M; HODMECH

Subject: Venue | Value Added Course | III year

#### Dear sir,

Department of Mechanical Engineering is organizing **Value Added Course** for III Year Mechanical Engineering (62 Nos) Students from **28.03.2022** to **30.03.2022**. Resource person from Excel MEP, Bangalore is going to handle this course.

Herewith I have shared you the venue details for this course.

#### Venue:

Data	Venue Details		
Date	FN	AN	
28.03.2022	CSE Conference Hall – I		
29.03.2022	Mechanical CAD Lab		
29.03.2022	Civil CAD Lab		
30.03.2022	HoP Lab	CSE Conference Hall – I	
	Centre for Prototype		

With Regards,
Madhan N R,
Assistant Professor,
Mechanical Department,



College of Engg and Tech,

Virudhunagar.

From: Zafar Khan

Sent: 23 March 2022 11:07

To: Madhan.N.R

**Cc:** akshayacreatech@gmail.com

Subject: Credit Courses for Engineering Students.

Dear Mr. Madhan, We thank you for getting in touch with us for our Courses.

We would like to introduce ourselves as Industry professionals working in the field of MEP (Mechanical Electrical & Plumbing) & have been associated in this Industry from the past 22 years and have been imparting training to Engineers & Diploma holders from the past 15 years. We have been associated with several professional Organizations in our field. We have successfully trained more than 3000 students from various Domains, Industry Verticals & Geographic locations in the field of MEP.

As discussed we would like to Offer three Credit Courses for your Students.

#### 1) HVAC ( Heating Ventilation & Air Conditioning ) Design with Introduction to other Building Services - 18 Hours

Introduction to HVAC, Psychrometrics, Heat Load Calculations, Practical Classes to be conducted on Designing Software for Heat load, Duct Design & Piping Design - Practical Hands On Demonstration of Installation of Split AC, including Gas Charging, Copper Piping & Filter Cleaning.

The above courses would be conducted at your premises after which a test would be conducted and based on its completion, a Course Completion certificate would be issued to all the participants.

The Cost of each credit course would be 1,20,000 /- Plus Taxes. Please do get in touch for any Clarifications required.

Thanks & Regards,

Zafar Ulla Khan / Mr.Lakshmi Narasimhan

One World Inc. - Air Conditioning & MEP Company Excel MEP Academy Akshaya Createch - Electrical & Solar Design & Build Company

5, 1st Cross, Lal Bagh Road, Bangalore -560027 +91-9886001720 +91 80 22272102 www.excelmep.com Thanks & Regards,

**Zafar Ulla Khan** 

One World Inc. - Air Conditioning & MEP Company



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S.P.G.Chidambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam – 625 701 (Near VIRUDHUNAGAR).

#### Department of Mechanical Engineering Three Member Committee - Minutes of Meeting for

#### **Value Added Course Selection**

Agenda		Value Added Course Selection Meeting	
Date	:	09/02/2022	
Time	:	01.00 PM	
Venue	:	HoD/Mech Cabin "E- Block"	
Members Present	:	Three Member Committee Members  1. Dr. S.S. Saravana kumar, ASP & HoD/Mech 2. Dr. S. Senthil, Prof. & Principal 3. Er. N.R. Madhan, AP/Mech  UG Coordinator 4. Dr. S. Thanga Kasi Rajan, AP/Mech  Chairperson 5. Dr. M. Prithiviraj, AP/Mech  Domain Experts 6. Dr. B. Prabhu, AP/Mech 7. Mr.B. Balavairavan, AP/Mech 8. Dr. S. Thanga Kasi Rajan, AP/Mech Class representative (2020 – 2024 Batch) 9. Mr. RAHUL.V (19UMEC005), III <sup>nd</sup> Year/ Student 10. Mr. YUVARAJ.K (19UMEC017), III <sup>nd</sup> Year/ Student 11. Mr. THOMAS LIVIN DANIYAL A (19UMEC033), III <sup>nd</sup> Year/ Student	
Minutes of the Meeting	:	<ol> <li>It is optional to complete a Value-Added Course for enhancing Industrial requirement. In this regard a three-member committee has been formed and a meeting is organized to select the course for registration.</li> <li>Meeting started by 01.00PM. Dr. S.S. Saravana Kumar, Associate Professor &amp; Head of the Department, welcome the gathering.</li> <li>Dr. M. Prithiviraj, Assistant Professor &amp; Chairperson of 2019-2023 batch has proposed various courses offered by         <ul> <li>Siemens Centre of Excellence in Manufacturing, National Institute of Technology, Tiruchirappalli and</li> <li>HVAC by Excel MEP, Bangalore.</li> </ul> </li> </ol>	

- Subject expects are suggested to offer Air Conditioning (Thermal) related courses.
- Dr. S. Thanga Kasi Rajan, Assistant Professor has advised to maintain SOP for value added course.
- Based on the suggestion given by the Subject Expects & 2019-2023 Batch Chairperson, 3 committee members for Value added course "HVAC" course offered by Excel MEP, Bangalore, agree to take this VI semester for 2019-2023 Batch students

#### Justification for the Course selection:

The justification for the course selection were as follows

- i. This Course will be useful for her project work
- ii. It is a 24-hour course
- iii. This Course is useful to beat Industrial Needs

Three Member Committee Members Dr. S.S. Saruvana kumar, ASP & HoD Mech N.R. Madhan, AP Moch

Dr. S. Thanga Kasi Rajan, AP/Mech

Dr. M. Prithiviraj, AP/Mech

main Experts

Er. B. Prabhu, AP Mech Mr.B. Balavarravan, AP Moch

Dr. S. Thanga Kasi Rajan, AP Mech

HoD/Mech



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#### **DEPARTMENT OF MECHCHANICAL ENGINEERING**

Value Added Course on HVAC

Conducted : EXCEL MEP, Bangalore

Year / Sem : III / IV

Course duration: 28.03.2022 to 30.03.2022

Batch: 2019 - 23

Duration of the Course: 24 Hrs

#### **Approval of Programme Assessment Committee**

Board of Study Meeting: IV

Mode: online (MS-Teams)

Date & Timing: 19.03.2022 & 3.00PM

Page No: 17 of 18

#### Dr. S. Thanga Kasi Rajan presented the list of value-added courses. The following discussions were made.

S.No.	Course Title	Total hours	Credits
1.	Programming on Computer Numerical Control		2
2.	Advanced Pro-E		2
3.	Machine Learning		2
4.	Block chain		2
5	Heating, Ventilation and Air Conditioning		2

The members of BoS recommend and proceed the same.

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VAC Coordinators

HoD/MECH

#### (An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI)

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S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

#### **Department of Mechanical Engineering**

Value Added Course : HVAC Year : III-Mech

Date : from 28.03.2022 to 30.03.2022 Sem : VI

Course conducted by : Excel MEP Training Academy, Bangalore

#### **Summary** Report

#### Day 1 | 28.03.2022

Course started by formal Inauguration function at 9.30am. Guest Er. Zafer Ulla Khan delivered his note on the topic of "Fundamental of Heating Ventilation and Air Conditioning (HVAC)". During the session, students interact with Speakers. At the end of the 3 sessions, students are received the course materials by the speakers.

#### Day 2 | 29.03.2022

Morning session, speaker delivered on the topics of "refrigeration cycle includes compressor, condenser, evaporator & expansion cycle".

Afternoon session, students derived "heat load calculation for different condition" using Ms-Excel and AutoCAD.

#### Day 3 | 30.03.2022

Forenoon session, students explored the heat load data book. They are calculated heat load for different condition. Student are explored various duck and its purpose.

Afternoon session, speakers practically demonstrated disassembly and assembly of Split AC. Students explored various part and its importance of Split AC.

At the end of the day, formal valedictory ceremony by Dr.S.Senthil , Principal & Dr.S.S.Saravanakumar, HoD cum ASP/Mechanical Department.

#### **Photo Proof**

#### Day 1 | 28.03.2022





#### Day 2 | 29.03.2022





#### Day 3 | 30.03.2022





Faculty In-charges

HoD/Mech







This is to certify that Mr. <u>AAKASH KANNAN.U</u> bearing Reg. No <u>920419114001</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. <u>ABISHEK KUMAR.S</u> bearing Reg. No <u>920419114002</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









ISO 9001:2015 Certified

This is to certify that Mr. <u>AJAY KUMAR.R</u> bearing Reg. No <u>920419114003</u> has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30<sup>th</sup> Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lai Bagh Road Bangalore - 560 027.









This is to certify that Mr. ARAVINDAN.C bearing Reg. No 920419114004 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022

**EXCEL MEP ACADEMY** 

Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. ARUNKUMAR.V bearing Reg. No 920419114005 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30<sup>th</sup> Mar 2022

EXCEL MEP ACADEMY
Regd. No : BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road









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### Certificate

This is to certify that Mr. \_\_\_\_\_ ASWIN.K \_\_\_\_\_ bearing Reg. No \_\_\_\_920419114006 \_\_has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30th Mar 2022

EXCEL MEP ACADEMY
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Bangalore - 560 027.







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## Certificate

This is to certify that Mr. <u>ASWIN SUNDAR.R</u> bearing Reg. No <u>920419114007</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022

Regd. No: BSG-4-00469-2017-18 #5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. BALASUBRAMANIYAN.R bearing Reg. No 920419114008 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. <u>BHUVANESH PANDIAN.P</u> bearing Reg. No <u>920419114009</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 #5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









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## Certificate

This is to certify that Mr. <u>DEEPAN KAARTHIK.T</u> bearing Reg. No <u>920419114010</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY
Regd. No: BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.

Director and Company







This is to certify that Mr. <u>GNANAPRAKASAM.G</u> bearing Reg. No <u>920419114011</u> has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 \$5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. GOBINATH.M bearing Reg. No 920419114012 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

\$7.00 \$1.00

Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 #5, 1st Cross, Lai Bagh Road Bangalore - 560 027.









This is to certify that Mr. <u>GOVARTHANAN.T</u> bearing Reg. No <u>920419114013</u> has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30<sup>th</sup> Mar 2022

EXCEL MEP ACADEMY
Regd. No: BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.









This is to certify that Mr. <u>JAGANATHAN.S</u> bearing Reg. No <u>920419114014</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY
Regd. No: BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.









This is to certify that Mr. <u>JEEVABALAN.J</u> bearing Reg. No <u>920419114015</u> has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY
Regd. No : BSG-4-00469-2017-18

# 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. <u>JOYSON RALPH JEBADURALV</u> bearing Reg. No <u>920419114016</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022

EXCEL MEP ACADEMY
Regd. No: BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.









This is to certify that Mr. <u>KALIDASAN.M</u> bearing Reg. No <u>920419114017</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. KARTHIK.S bearing Reg. No 920419114018 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

**EXCEL MEP ACADEMY** 

Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lai Bagh Road Bangalore - 560 027. Director a.m.







This is to certify that Mr. KUMARESH.R bearing Reg. No 920419114019 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.







KAMAR

### Certificate

This is to certify that Mr. LOKESH.S bearing Reg. No 920419114020 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.







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### Certificate

This is to certify that Mr. MADHAVAN.G bearing Reg. No 920419114021 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30<sup>th</sup> Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027. Director and B





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KAMARAJ COLLEGE OF ENGINEERING & TECHNOLOGY

### Certificate

This is to certify that Mr. MADHAVAN.P bearing Reg. No 920419114022 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027. Director Sie







This is to certify that Mr. MANOJ.D L bearing Reg. No 920419114023 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



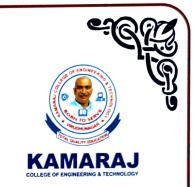
Date: 30th Mar 2022

EXCEL MEP ACADEMY
Regd. No: BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.









This is to certify that Mr. MUTHUVEERASALAPANDIAN.M bearing Reg. No 920419114024 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.







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COLLEGE OF ENGINEERING & TECHNOLOGY

### Certificate

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This is to certify that Mr. NARENDRAN.K bearing Reg. No 920419114025 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. <u>NAVANEETHA KRISHNAN.N</u> bearing Reg. No <u>920419114026</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. NAVEEN.D bearing Reg. No 920419114027 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.







KAMARAJ
COLLEGE OF ENGINEERING & TECHNOLOGY

# Certificate

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This is to certify that Mr. PRAVEEN RAJ.R bearing Reg. No 920419114028 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022

**EXCEL MEP ACADEMY** 

Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. RAHUL.V bearing Reg. No 920419114029 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30<sup>th</sup> Mar 2022









This is to certify that Mr. RAJESH KANNAN.R bearing Reg. No 920419114030 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022









This is to certify that Mr. RAMPRASATH.C bearing Reg. No 920419114031 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022

**EXCEL MEP ACADEMY** 

Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. RATHINA SIVA MALAYAPPAN.G bearing Reg. No 920419114032 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

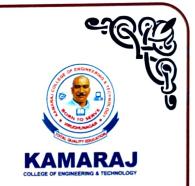


Date: 30th Mar 2022









This is to certify that Mr. <u>SATHEESH KUMAR.K</u> bearing Reg. No <u>920419114033</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 #5, 1st Cross, Lal Bagh Road Rangalore - 560 027.









This is to certify that Mr. SIVA ANANTH.E bearing Reg. No 920419114034 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022







KAMARA

ISO 9001:2015 Certified

## Certificate

This is to certify that Mr. SIVABARATH.K bearing Reg. No 920419114035 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

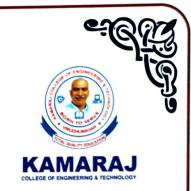
\$10-\$1

Date: 30th Mar 2022









This is to certify that Mr. SUBHASH RAAJ.K bearing Reg. No 920419114036 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 #5, 1st Cross. Lal Bagh Road Barrand Res - 560.027









This is to certify that Mr. <u>THOMAS LIVIN DANIYAL.A</u> bearing Reg. No <u>920419114038</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

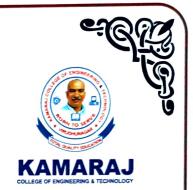


Date: 30th Mar 2022









This is to certify that Mr. <u>VENKATESHWARA.R</u> bearing Reg. No <u>920419114039</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022







ISO 9001:2015 Certified



# Certificate

This is to certify that Mr. VIGNESH.G bearing Reg. No 920419114040 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

979-9

Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 \$5, 1st Cross, Lal Bagh Road Jan Danni Ofrector







This is to certify that Mr. VIGNESH.K B bearing Reg. No 920419114041 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30th Mar 2022









This is to certify that Mr. VIGNESH.NA bearing Reg. No 920419114042 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY
Regd. No: BSG-4-00469-2017-18
\$ 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.

That January Branch Comments of the Comments o







This is to certify that Mr	VIMAL.A	bearing Reg. No	92041911	.4043 has
successfully completed the valu	ue added course, condu	ucted in the field of " <b>HVA</b>	C Design	Concepts"
from our training division durin	ng the period Mar 28 <sup>th</sup> t	o Mar 30 <sup>th</sup> 2022		



Date: 30th Mar 2022

**EXCEL MEP ACADEMY** 

Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027.









This is to certify that Mr. YUVARAJ.K bearing Reg. No 920419114044 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 \$5, 1st Cross, Lal Bagh Road Bangalore - 560 027.







ISO 9001:2015 Certified



# Certificate

This is to certify that Mr. ARUNKUMAR.P bearing Reg. No 920419114301 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022









This is to certify that Mr. BALA SUDHARSAN.N bearing Reg. No 920419114302 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30th Mar 2022

EXCEL MEP ACADEMY Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027. Lajar Damil B Director





KAMAR

ISO 9001:2015 Certified

## Certificate

This is to certify that Mr. DHARUN.N bearing Reg. No 920419114303 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022









This is to certify that Mr. GANESH KARTHIK.S bearing Reg. No 920419114304 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Repositore - 560 027.









ISO 9001:2015 Certified

This is to certify that Mr. HARIHARAN.R bearing Reg. No 920419114305 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

Date: 30th Mar 2022









This is to certify that Mr. MANIKANDA PRABHU.K bearing Reg. No 920419114306 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

EXCEL MEP ACADEMY
Regd. No : BSG-4-00469-2017-18
# 5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.

Jan Dann Contractor





TRAINING | MEP SERVICES | JOBS



# Certificate

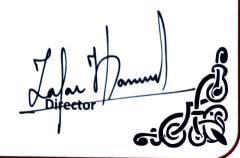
This is to certify that Mr. MICKAEL RAJ.P bearing Reg. No 920419114307 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022









This is to certify that Mr. MOHAMEDIRSHATH.A bearing Reg. No 920419114308 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road

Bangalore - 560 027.









This is to certify that Mr. NAGARAJ.S bearing Reg. No 920419114309 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

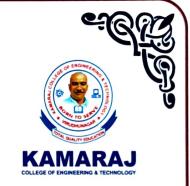


Date: 30th Mar 2022









This is to certify that Mr. <u>PANDI KAMAL KRISHNA.A</u> bearing Reg. No <u>920419114310</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 # 5, 1st Cross, Lal Bagh Road Bangalore - 560 027. Director Comments







This is to certify that Mr. PARTHIBAN.P bearing Reg. No 920419114311 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022



Date: 30th Mar 2022









This is to certify that Mr. PRABAKARAN.A bearing Reg. No 920419114312 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022









ISO 9001:2015 Certified

# Certificate

This is to certify that Mr. RAGUL.S bearing Reg. No 920419114313 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30<sup>th</sup> Mar 2022









This is to certify that Mr	RATHISH.S	bearing Reg. No	920419114314	_has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30th Mar 2022









This is to certify that Mr. SENTHIL KUMAR.M bearing Reg. No 920419114315 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28th to Mar 30th 2022

Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18 #5, 1st Cross, Lal Bagh Road Regalore - 560 027.







KAMARAJ
COLLEGE OF ENGINEERING & TECHNOLOGY

# Certificate

ISO 9001:2015 Certified

This is to certify that Mr. SIVAPACKIA.R bearing Reg. No 920419114316 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022









This is to certify that Mr. <u>SIVA SUBRAMANIAN.S</u> bearing Reg. No <u>920419114317</u> has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

Date: 30<sup>th</sup> Mar 2022









This is to certify that Mr. VIJAYAKUMAR.S bearing Reg. No 920419114318 has successfully completed the value added course, conducted in the field of "HVAC Design Concepts" from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022

Date: 30<sup>th</sup> Mar 2022

**EXCEL MEP ACADEMY** 

Regd. No : BSG-4-00469-2017-18 # 5, 1st Cross, Lai Bagh Road Bangalore - 560 027.









ISO 9001:2015 Certified

This is to certify that Mr. VINISH KUMAR J bearing Reg. No 920419114319 has

successfully completed the value added course, conducted in the field of "HVAC Design Concepts"

from our training division during the period Mar 28<sup>th</sup> to Mar 30<sup>th</sup> 2022



Date: 30th Mar 2022

Regd. No: BSG-4-00469-2017-18
5, 1st Cross, Lal Bagh Road
Bangalore - 560 027.

Zalland Brector and Brector

7/22/22, 3:12 PM HVAC Test

#### **HVAC** Test

Value Added Course : HVAC Year : III-Mech Date : from 28.03.2022 to 30.03.2022 Sem : VI

**Course conducted by: Excel MEP Training Academy, Bangalore** 

S	Student Name	
S	Student Roll No	
it	. Heat transfer from one part of solid substance to another part within tself or another solid substance placed in physical contact is known as	1 point
( (	a) Conduction b) Retraction c) Convection d) Radiation	
b	Heat transfer within a fluid itself, maybe liquid/gases and is carried out by transfer of one fraction of fluid to another portion is known as  Mark only one oval.	1 point
(	a) Conduction b) Retraction c) Convection d) Radiation	

5.	3.To change Fahrenheit to Celsius, which formula is used?	1 point
	Mark only one oval.	
	a) C =(F+32) ÷ 1.8	
	b) C=(F-32) x 1.8	
	c) C=(F-32) ÷ 1.8	
	d) C= (F-32) +1.8	
6.	4. Latent heat is measured in	1 point
	Mark only one oval.	
	a) Degrees Celsius, Fahrenheit and Kelvin	
	b) International System of Units	
	c) British Thermal Units	
	d) Board of Trade Unit	
7.	5. In Fahrenheit, the boiling point of water is	1 point
	Mark only one oval.	
	a) 100 degrees	
	b) 112 degrees	
	c) 221 degrees	
	d) 212 degrees	
8.	6. The temperature of the air when it is fully saturated and the moisture	1 point
	condenses on a surface is known as	
	Mark only one oval.	
	a) Dew point temperature	
	b) Dry bulb temperature	
	c) Wet bulb temperature	
	d) Supply air temperature	

9.	7. The ratio of the actual moisture present in the air to the maximum moisture the air can hold is known as	1 point
	Mark only one oval.	
	a) Relative humidity	
	b) Humidity ratio	
	c) Specific humidity	
	d) Absolute humidity	
10.	8. Some of the air flowing through the coil impinges on the water tubes or the fins and is cooled to the ADP, the percentage of air that passes through the coil unchanged is called	1 point
	Mark only one oval.	
	a) U-Factor	
	b) Bypass Factor	
	c) Thermal Resistance	
	d) ESHF	
11.	9. The conditioned air being supplied from the air conditioner outlet and is treated & contains all the desired qualities as provided by the air conditioning system is known as	1 point
	Mark only one oval.	
	a) Supply Air	
	b) Return Air	
	c) Fresh Air	
	d) Exhaust Air	

12.	10. The equipment which pumps the designed quantity of dehumidified air to respective areas by means of ducting is known as	1 point
	Mark only one oval.	
	a) High wall A/C	
	b) Cassette A/C	
	c) Air Handling Unit	
	d) Chiller	
13.	11. Which of these are not a part of Air-Cooled chiller system?	2 points
	Mark only one oval.	
	a) Compressor	
	b) Condenser	
	c) Evaporator	
	d) Cooling tower	
14.	12. The temperature and relative humidity of air to satisfy human comfort conditions are	2 points
	Mark only one oval.	
	a) 30 Deg C and 60%	
	<b>b)</b> 13 Deg C and 40%	
	c) 24 Deg C and 50%	
	d) 40 Deg C and 70%	

15.	13. The equipment in which heat transfer takes place between the super- 2 po	ints
	heated refrigerant and the cooling medium and the refrigerant is cooled is	
	called	

Mark only one oval.

( a) Condense
---------------

- b) Compressor
- c) Evaporator
- d) Expansion valve
- 16. 14. The Given image refers to

2 points

Mark only one oval.

	) ~	امناا\		II A/C
	<i>)</i> a	) HIGH	ı wa	II A/ C
<u> </u>		,		, -

- b) Window A/C
- c) Cassette A/C
- d) Air Handling unit

image for question no 14



17.	15. A refrigeration ton is approximately equivalent to	2 points
	Mark only one oval.	
	a) 9,500 Btu/Hr	
	b) 12,000 Btu/Hr	
	c) 11,000 Btu/Hr	
	d) 13,500 Btu/Hr	

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(An Autonomous Institution -AFFILIATED TO ANNA UNIVERSITY, CHEMNA)

S.P.G.Chidambura Neder - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR). Value Added Course on "HVAC"

SNo	Rollno	Student Name	28.07.2022	29.07.2022	30.07.2022
1	19UMEC001	NARENDRAN K	Ems.	F.W.	END.
2	19UMEC002	JOYSON RALPH JEBADURALV	V. Teny.	Vita.	V. 123
3	19UMEC003	VIMALA	0	7.1	1 XeV
4	19UMEC004	BALASUBRAMANIYAN.R	R.Bu-	R.Bn-	RIRIN
5	19UMEC005	RAHUL.V (	10-~	P	P
6	19UMEC006	RAJESH KANNAN.R	THE STATE OF THE S	M	NA -
7	19UMEC007	LOKESH.S	2. bokus	Stoketh	9 Jokesh
8	19UMEC008	ASWIN.K	Ashur	Achorn	75hwin
9	19UMEC009	BHUVANESH PANDIAN.P	PRICE	Qual al	020
10	19UMEC010	KARTHIK,S	Spannik	5 Kouphik	( Reunth &
. 11	19UMEC011	GOBINATH.M	Out	as.	.00
12	19UMEC012	MUTHUVEERASALAPANDIAN.M	M. M. Vis Pyrus	W.W. WSW	M.MUSKILL.
13	19UMEC013	NAVANEETHA KRISHNAN.N	ns	mas	I har -
14	19UMEC014	SUBHASH RAAJ.K	110	FR	114
15	19UMEC015	MANOJ.D L	Dinos	Dan	Das
16	19UMEC016	JEEVABALANJ	J. Joseph Rolan	J. Joova Palar	Town Pale
17	19UMEC017	YUVARAJ.K	MUNRAT.E	Yours is	YWHAJ. IC
18	19UMEC019	MADHAVAN.G	G.Madleson	GMadhara	11 8 21
19	19UMEC020	RATHINA SIVA MALAYAPPAN,G	Q D	and the second	200
		MADHAVAN.P	P. Madhan	B H Odhara	PHOdran
21	19UMEC022	JAGANATHAN.S	time	Tun-	1
22	19UMEC023	ABISHEK KUMAR.S	200	al Com	ol die
		SATHEESH KUMAR.K	K Catherla	K ( Bitter )	K. Gattern -
A COLOR		AAKASH KANNAN.U	Hoskor.	Nother.	
		AJAY KUMAR.R	Char	0	A-
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	19UMEC029		10000	De Lan	100
29	19UMEC030	ARUNKUMAR.V	VA moten	V Alman	1 A Agan
30	19UMEC031	KUMARESH.R	RUIL	RUSS	D.16
31	19UMEC032	PRAVEEN RAJ.R	P	RICE	PAR
32	19UMEC033	THOMAS LIVIN DANIYALA	1.2	1-2-5	12.2.
-	19UMEC034		1	100	The same of the sa
-		SIVA ANANTH.E	Ch	A	0
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-	The second liverage and the second	ARAVINDAN.C	Frador	Againster	Aravida
-	The second secon	GNANAPRAKASAM.G	940000	V	NAME AND ADDRESS OF THE OWNER, WHEN PERSONS AND ADDRESS O
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	19UMEC041		V	12	1
interestinate of	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN TWO	VENKATESHWARA.R	1	Ya.	- A

42	19UMEC043	SIVABARATH.K	De	ENT	199
43	19UMEC044	RAMPRASATH.C	CRome	( Park	C. Ram
44	19UMEC045	GANESH KARTHIK,S		Ш	-44-
45	19UMEC046	PARTHIBAN.P	Dur	0	Jan.
45	19UMEC047	MICKAEL RALP	Durany.	Jan Doy	a vet
47	19UMEC048	VINISH KUMARJ	TON VIOLE	1125V. 2	I. Vivia
48	19UMEC049	SIVAPACKIA.R	P. SNORIKIO	RSIVOTACKIO	R. Showack
49	19UMEC050	RAGULS	6 hors	b. looks	Liller
50	19UMEC051	VUAYAKUMAR.S	S. Variation	S. Villey J.	S. Walled
51	19UMEC052	SENTHIL KUMAR.M	Mattella	WARK	Mating
52	19UMEC053	ARUNKUMAR,P	100	The	Ayo+
53	19UMEC054	PANDI KAMAL KRISHNA,A	APERMISHI	APENISA	X PKKT 35
54	19UMEC055	RATHISH.S	B. Ratt	12. Rade	S. Ratt
55	19UMEC056	NAGARAJ.S	Cinoparti	Come D	- Ciaras
56	19UMEC057	PRABAKARAN.A	wells	A-RAD -	Alle
57	19UME0058	DHARUN,N	Du	70m	Du
58	19UMEC059	BALA SUDHARSAN.N	- EXCHA	aig_	Roll
59	19UMEC060	MOHAMEDIRSHATH.A	A. Tahad	A. rapid	Atahul
60	19UMEC061	HARIHARAN.R	12- kny	12 Must	2. (fre
61	19UMEC062	MANIKANDA PRABHU.K	K maily	K marie	K main
62	19UMEC063	SIVA SUBRAMANIAN.S	121	2 1	2-1

HoD/Mech

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П	V	А	16	51

Value Added Course : HVAC Year : III-Mech Date : from 28.03.2022 to 30.03.2022 Sem : VI

**Course conducted by : Excel MEP Training Academy, Bangalore** 

Student Name  M.SENTHIL KUMAR
Student Roll No  19umec052
Heat transfer from one part of solid substance to another part within itself or     another solid substance placed in physical contact is known as
a) Conduction
b) Retraction
C) Convection
O d) Radiation

2. Heat transfer within a fluid itself, maybe liquid/gases and is carried out by transfer of one fraction of fluid to another portion is known as	1 point
a) Conduction	
b) Retraction	
c) Convection	
d) Radiation	
3.To change Fahrenheit to Celsius, which formula is used?	1 point
a) C =(F+32) ÷ 1.8	
b) C=(F-32) x 1.8	
C) C=(F-32) ÷ 1.8	
d) C= (F-32) +1.8	
4. Latent heat is measured in	1 point
a) Degrees Celsius, Fahrenheit and Kelvin	
b) International System of Units	
c) British Thermal Units	
d) Board of Trade Unit	

5. In Fahrenheit, the boiling point of water is _	1 point
a) 100 degrees	
b) 112 degrees	
C) 221 degrees	
d) 212 degrees	
6. The temperature of the air when it is fully s a surface is known as	aturated and the moisture condenses on 1 point
a) Dew point temperature	
b) Dry bulb temperature	
c) Wet bulb temperature	
od) Supply air temperature	
7. The ratio of the actual moisture present in can hold is known as	the air to the maximum moisture the air 1 point
a) Relative humidity	
b) Humidity ratio	
c) Specific humidity	
d) Absolute humidity	

	e coil impinges on the water tubes or the fins and air that passes through the coil unchanged is	1 point
a) U-Factor		
b) Bypass Factor		
o) Thermal Resistance		
d) ESHF		
	I from the air conditioner outlet and is treated & ovided by the air conditioning system is known as	1 point
a) Supply Air		
b) Return Air		
C) Fresh Air		
o d) Exhaust Air		
10. The equipment which pumps the crespective areas by means of ducting i		1 point
a) High wall A/C		
b) Cassette A/C		
c) Air Handling Unit		
d) Chiller		

11. Which of these are not a part of Air-Cooled chiller system?	2 points
a) Compressor	
b) Condenser	
C) Evaporator	
d) Cooling tower	
12. The temperature and relative humidity of air to satisfy human comfort conditions are	2 points
a) 30 Deg C and 60%	
(a) 13 Deg C and 40%	
<b>o</b> c) 24 Deg C and 50%	
(a) 40 Deg C and 70%	
13. The equipment in which heat transfer takes place between the super-heated refrigerant and the cooling medium and the refrigerant is cooled is called	2 points
a) Condenser	
b) Compressor	
C) Evaporator	
d) Expansion valve	

14. The Given image refers to

2 points

- a) High wall A/C
- b) Window A/C
- o Cassette A/C
- d) Air Handling unit

#### image for question no 14



15. A refrigeration ton is approximately equivalent to

2 points

- a) 9,500 Btu/Hr
- **b**) 12,000 Btu/Hr
- c) 11,000 Btu/Hr
- d) 13,500 Btu/Hr

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Value Added Course : HVAC

Date : from 28.03.2022 to 30.03.2022

Year : III-Mech

Sem : VI

**Course conducted by : Excel MEP Training Academy, Bangalore** 

Student Name  Rathish	
Student Roll No  19umec055	
1. Heat transfer from one part of solid substance to another part within itself or another solid substance placed in physical contact is known as	1 point
a) Conduction	
b) Retraction	
C) Convection	
O d) Radiation	

7/22/22, 3:15 PM

2. Heat transfer within a fluid itself, maybe liquid/gases and is carried out by transfer of one fraction of fluid to another portion is known as	1 point
a) Conduction	
b) Retraction	
C) Convection	
d) Radiation	
3.To change Fahrenheit to Celsius, which formula is used?	1 point
a) C =(F+32) ÷ 1.8	
(a) b) C=(F-32) x 1.8	
C) C=(F-32) ÷ 1.8	
(d) C= (F-32) +1.8	
4. Latent heat is measured in	1 point
a) Degrees Celsius, Fahrenheit and Kelvin	
b) International System of Units	
C) British Thermal Units	
d) Board of Trade Unit	

5. In Fahrenheit, the boiling point of water is	1 point
a) 100 degrees	
b) 112 degrees	
C) 221 degrees	
o d) 212 degrees	
6. The temperature of the air when it is fully saturated and the moisture condenses a surface is known as	On 1 point
a) Dew point temperature	
b) Dry bulb temperature	
c) Wet bulb temperature	
d) Supply air temperature	
7. The ratio of the actual moisture present in the air to the maximum moisture the a can hold is known as	ir 1 point
a) Relative humidity	
b) Humidity ratio	
c) Specific humidity	
d) Absolute humidity	

8. Some of the air flowing through the coil impinges on the water tubes or the fins and 1 poil is cooled to the ADP, the percentage of air that passes through the coil unchanged is called	nt
a) U-Factor	
b) Bypass Factor	
c) Thermal Resistance	
O d) ESHF	
9. The conditioned air being supplied from the air conditioner outlet and is treated & 1 poi contains all the desired qualities as provided by the air conditioning system is known as	nt
a) Supply Air	
b) Return Air	
C) Fresh Air	
d) Exhaust Air	
10. The equipment which pumps the designed quantity of dehumidified air to 1 poi respective areas by means of ducting is known as	nt
a) High wall A/C	
b) Cassette A/C	
c) Air Handling Unit	
O d) Chiller	

11.	Which of these are not a part of Air-Cooled chiller system?	2 points
0	a) Compressor	
0	b) Condenser	
0	c) Evaporator	
•	d) Cooling tower	
12. are		2 points
0	a) 30 Deg C and 60%	
0	b) 13 Deg C and 40%	
<b>O</b>	c) 24 Deg C and 50%	
0	d) 40 Deg C and 70%	
	The equipment in which heat transfer takes place between the super-heated rigerant and the cooling medium and the refrigerant is cooled is called	2 points
0	a) Condenser	
0	b) Compressor	
0	c) Evaporator	
<b>O</b>	d) Expansion valve	

14. The Given image refers to

2 points

- a) High wall A/C
- b) Window A/C
- c) Cassette A/C
- d) Air Handling unit

#### image for question no 14



15. A refrigeration ton is approximately equivalent to

2 points

- a) 9,500 Btu/Hr
- b) 12,000 Btu/Hr
- o 11,000 Btu/Hr
- d) 13,500 Btu/Hr

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## Google Forms



08-07-2022

#### **TO WHOM SO EVER IT MAY CONCERN**

Please find below Mark of students who had taken the test for the value added course "HVAC Design Concepts" .

	Department : MECHANICAL ENGINEERING Year : 3 Semester : 6				
SL .No	Regno Student Name		Mark		
1	920419114001	AAKASH KANNAN.U	91		
2	920419114002	ABISHEK KUMAR.S	93		
3	920419114003	AJAY KUMAR.R	93		
4	920419114004	ARAVINDAN.C	95		
5	920419114005	ARUNKUMAR.V	92		
6	920419114006	ASWIN.K	92		
7	920419114007	ASWIN SUNDAR.R	91		
8	920419114008	BALASUBRAMANIYAN.R	94		
9	920419114009	BHUVANESH PANDIAN.P	95		
10	920419114010	DEEPAN KAARTHIK.T	93		
11	920419114011	GNANAPRAKASAM.G	93		
12	920419114012	GOBINATH.M	95		
13	920419114013	GOVARTHANAN.T	92		
14	920419114014	JAGANATHAN.S	92		
15	920419114015	JEEVABALAN.J	92		
16	920419114016	JOYSON RALPH JEBADURAI.V	92		
17	920419114017	KALIDASAN.M	93		
18	920419114018	KARTHIK.S	94		
19	920419114019	KUMARESH.R	91		
20	920419114020	LOKESH.S	93		
21	920419114021	MADHAVAN.G	93		
22	920419114022	MADHAVAN.P	94		
23	920419114023	MANOJ.D L	93		
24	920419114024	MUTHUVEERASALAPANDIAN.M	93		
25	920419114025	NARENDRAN.K	95		
26	920419114026	NAVANEETHA KRISHNAN.N	94		
27	920419114027	NAVEEN.D	94		

Regd. Office: #5, 1<sup>st</sup> Cross, Lalbagh Road, Near Subbaiah Circle, Bangalore-560027 Phone: +91-9886001720 Tel: +91 80 22272102 Email: oneworldinc@gmail.com

Website: www.oneworldmep.com



28	920419114028	PRAVEEN RAJ.R	94
29	920419114029	RAHUL.V	95
30	920419114030	RAJESH KANNAN.R	91
31	920419114031	RAMPRASATH.C	93
32	920419114032	RATHINA SIVA MALAYAPPAN.G	90
33	920419114033	SATHEESH KUMAR.K	96
34	920419114034	SIVA ANANTH.E	96
35	920419114035	SIVABARATH.K	91
36	920419114036	SUBHASH RAAJ.K	91
37	920419114038	THOMAS LIVIN DANIYAL.A	96
38	920419114039	VENKATESHWARA.R	92
39	920419114040	VIGNESH.G	94
40	920419114041	VIGNESH.K B	94
41	920419114042	VIGNESH.NA	92
42	920419114043	VIMAL.A	91
43	920419114044	YUVARAJ.K	95
44	920419114301	ARUNKUMAR.P	91
45	920419114302	BALA SUDHARSAN.N	93
46	920419114303	DHARUN.N	92
47	920419114304	GANESH KARTHIK.S	94
48	920419114305	HARIHARAN.R	94
49	920419114306	MANIKANDA PRABHU.K	92
50	920419114307	MICKAEL RAJ.P	91
51	920419114308	MOHAMEDIRSHATH.A	96
52	920419114309	NAGARAJ.S	93
53	920419114310	PANDI KAMAL KRISHNA.A	94
54	920419114311	PARTHIBAN.P	92
55	920419114312	PRABAKARAN.A	94
56	920419114313	RAGUL.S	93
57	920419114314	RATHISH.S	94
58	920419114315	SENTHIL KUMAR.M	93
59	920419114316	SIVAPACKIA.R	97
60	920419114317	SIVA SUBRAMANIAN.S	93
61	920419114318	VIJAYAKUMAR.S	92
62	920419114319	VINISH KUMAR.J	93



Regd. Office: #5, 1st Cross, Lalbagh Road, Near Subbaiah Circle, Bangalore-560027 Phone: +91-9886001720 Tel: +91 80 22272102 Email: oneworldinc@gmail.com Website: www.oneworldmep.com



# (An Autonomous Institution - AFFILIATED TO ANNA UNIVERSITY, CHENNAI) S.P.G.Chidambara Nadar - C.Nagammal Campus S.P.G.C. Nagar, K.Vellakulam - 625 701 (Near VIRUDHUNAGAR).

#### **DEPARTMENT OF MECHANICAL ENGINEERING**

Value Added Course on HEATING VENTILATION & AIR CONDITIONING

Year / Sem Batch: III / VI / 2019 – 23 Conducted: Excel MEP, Bangalore

!8.03.2022 to 30.03.2022

S.No	Rollno	Regno	Student Name	Mark
1	19UMEC025		AAKASH KANNAN.U	91
2	19UMEC023	920419114002	ABISHEK KUMAR.S	93
3	19UMEC026	920419114003	AJAY KUMAR.R	93
4	19UMEC037	920419114004	ARAVINDAN.C	95
5	19UMEC030	920419114005	ARUNKUMAR.V	92
6	19UMEC008	920419114006	ASWIN.K	92
7	19UMEC039	920419114007	ASWIN SUNDAR.R	91
8	19UMEC004	920419114008	BALASUBRAMANIYAN.R	94
9	19UMEC009	920419114009	BHUVANESH PANDIAN.P	95
10	19UMEC028	920419114010	DEEPAN KAARTHIK.T	93
11	19UMEC038	920419114011	GNANAPRAKASAM.G	93
12	19UMEC011	920419114012	GOBINATH.M	95
13	19UMEC027	920419114013	GOVARTHANAN.T	92
14	19UMEC022	920419114014	JAGANATHAN.S	92
15	19UMEC016	920419114015	JEEVABALAN.J	92
16	19UMEC002	920419114016	JOYSON RALPH JEBADURAI.V	92
17	19UMEC036	920419114017	KALIDASAN.M	93
18	19UMEC010	920419114018	KARTHIK.S	94
19	19UMEC031	920419114019	KUMARESH.R	91
20	19UMEC007	920419114020	LOKESH.S	93
21	19UMEC019	920419114021	MADHAVAN.G	93
22	19UMEC021	920419114022	MADHAVAN.P	94
23	19UMEC015	920419114023	MANOJ.D L	93
24	19UMEC012	920419114024	MUTHUVEERASALAPANDIAN.M	93
25	19UMEC001	920419114025	NARENDRAN.K	95
26	19UMEC013	920419114026	NAVANEETHA KRISHNAN.N	94
27	19UMEC029	920419114027	NAVEEN.D	94
28	19UMEC032	920419114028	PRAVEEN RAJ.R	94
29	19UMEC005	920419114029	RAHUL.V	95
30	19UMEC006	920419114030	RAJESH KANNAN.R	91
31	19UMEC044	920419114031	RAMPRASATH.C	93
	19UMEC020	920419114032	RATHINA SIVA MALAYAPPAN.G	90
33	19UMEC024	920419114033	SATHEESH KUMAR.K	96
34	19UMEC035	920419114034	SIVA ANANTH.E	96
35	19UMEC043	920419114035	SIVABARATH.K	91
36	19UMEC014	920419114036	SUBHASH RAAJ.K	91
37	19UMEC033	920419114038	THOMAS LIVIN DANIYAL.A	96
38	19UMEC042	920419114039	VENKATESHWARA.R	92
39	19UMEC041	920419114040	VIGNESH.G	94
40	19UMEC040	920419114041	VIGNESH.K B	94
41	19UMEC034	920419114042	VIGNESH.NA	92

42	19UMEC003	920419114043	VIMALA	91
43	19UMEC017	920419114044	YUVARAJK	95
44	19UMEC053	920419114301	ARUNKUMAR P	91
45	19UMEC059	920419114302	BALA SUDHARSAN.N	93
45	19UMEC058	920419114303	DHARUN.N	92
4.7	19UMECO45	920419114304	GANESH KARTHIK.S	94
45	19UMECD61	920419114305	HARIHARAN.R	94
49	19UMEC062	920419114306	MANIKANDA PRABHU.K	92
50	19UMEC047	920419114307	MICKAEL RAJ.P	91
51	19UMEC060	920419114308	MOHAMEDIRSHATH.A	96
52	19UMEC056	920419114309	NAGARAJ.S	93
53	19UMEC054	920419114310	PANDI KAMAL KRISHNA.A	94
54	19UMEC046	920419114311	PARTHIBAN.P	92
55	19UMEC057	920419114312	PRABAKARAN,A	94
56	19UMEC050	920419114313	RAGUL.S	93
57	19UMEC055	920419114314	RATHISH.S	94
58	19UMEC052	920419114315	SENTHIL KUMAR.M	93
59	19UMEC049	920419114316	SIVAPACKIA.R	97
60	19UMEC063	920419114317	SIVA SUBRAMANIAN.S	93
61	19UMEC051	920419114318	VIJAYAKUMAR.S	92
62	19UMEC048	920419114319	VINISH KUMAR.J	93

Statt Incharge

Bean Academics

# Feedback Form | III Year | Value **Added Course**

Title of the Program: Value added course for "HVAC"

**Participants** : III-year students

: 28.03.2022 to 30.03.2022 **Date** Conducted by : Excel MEP, Bangalore Software used : RIVET & MS EXCEL

Mode : OFF Line

#### **Coordinators:**

Mr. Madhan N R, AP/Mech, Dr. Prithiviraj M, AP/Mech, Department of Mechanical Engineering,

Instructions: Please indicate your level of agreement the statements listed below

- 4 Star Strong Agree
- 3 Star Agree
- 2 Star Neutral
- 1 Star Dis-Agree
- \* Required
- \* This form will record your name, please fill your name.

1. The objectives of the training were clearly defined by the Co-ordinator \*









2	Darticipation	and	interaction	Moro	oncourse	امط
۷.	<b>Participation</b>	anu	mieraction	were	encourag	leu.

\*



3. The topics covered were relevant to me.

\*



4. The content was organized and easy to follow.

\*



5. This training experience will be useful me. \*



6. The trainer was knowledgeable about the training topics.

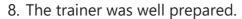
\*



7. The trainer was well prepared.

\*





\*



9. The training objectives were met.

\*



10. The training objectives were met.

\*



11. The time allotted for the training was sufficient

\*



12. The CAD Lab and CNC Machine were adequate and comfortable. \*



# Your view about this programme

13.	what did you like most about this training?  *
14.	What aspects of the training could be improved? *
15.	How do you hope to change your practice as a result of this training? *
16.	Please share over all comments about this programme. *
17.	Do you suggest this programme to your juniors *
	○ No
	Yes

#### Certificate Details

18. Kindly upload your certificate here. (Please share as a PDF within 5MB) \*



File number limit: 1 Single file size limit: 10MB Allowed file types: Word, Excel, PPT, PDF, Image, Video, Audio

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Microsoft Forms

harbon.s.c.

Approved by

HoD/Mech



# Feedback Form | III Year | Value Added Course

46

Responses

09:25

Average time to complete

Active

Status

1. The objectives of the training were clearly defined by the Co-ordinator (0 point)

46

Responses



3.43 Average Rating

2. Participation and interaction were encouraged. (0 point)

46

Responses



3.57 Average Rating

3. The topics covered were relevant to me. (0 point)

46

Responses



3.46 Average Rating

4. The content was organized and easy to follow. (0 point)

46

Responses



3.50 Average Rating

5. This training experience will be useful me. (0 point)

46

Responses



3.57 Average Rating

6. The trainer was knowledgeable about the training topics. (0 point)

46

Responses



3.52 Average Rating

7. The trainer was well prepared. (0 point)

46

Responses



3.50 Average Rating

8. The trainer was well prepared. (0 point)

46

Responses



3.50 Average Rating

9. The training objectives were met. (0 point)

46

Responses



3.48 Average Rating

10. The training objectives were met. (0 point)

46

Responses



3.37 Average Rating

11. The time allotted for the training was sufficient (0 point)

46

Responses



3.35 Average Rating

12. The CAD Lab and Demo Session were adequate and comfortable. (0 point)

46

Responses



3.50 Average Rating

13. What did you like most about this training? (0 point)

46 Responses Latest Responses "cnc machine" "Good" "Yes "

**9** respondents (**20**%) answered **Cnc** for this question.

**Creo programe** thing **Ceri software** cnc machine CNC Lab **Cero software** advanced EDM thing is nice

Creo designing Credo softwar Creo and Cnc Creo software staff's useful CNC IATHE **Learning about creo** 

14. What aspects of the training could be improved? (0 point)

46

Responses

Latest Responses "Nothing" "Skills development" "Nothing "

**Creo software** highly improved

6 respondents (13%) answered good for this question.

thinking aspects demo

software knowledge

**Needed to learn** Creo **Duration time** period not

**good** software Learnin CNC time period Cno **Time duration** SI

**Good students time and Materials** 

15. How do you hope to change your practice as a result of this training? (0 point)

Latest Responses

"Nothing"

"Good"

"Nothing "

8 respondents (17%) answered good for this question.

MODELLING

effort

Creo is good

Upgrade our level

future very useful

conspect

No idea

conspect

Designer

Machine c

touch v

quickly

training is useful

Creo software

Excellen

16. Please share over all comments about this programme. (0 point)

Latest Responses

"Nice"

"Nill"

"Nice"

12 respondents (26%) answered Good for this question.

cnc coding useful useful creo company creo idea about creo company machine creo i thanks to CIPET cipet cnc Good knowledge of creo Thanks creo is good basic knowledge CNC machine

## 17. Do you suggest this programme to your juniors (0 point)

43

3



### 18. Kindly upload your certificate here. (0 point) (Please share as a PDF within 5MB)

46

Responses

Latest Responses



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cipet\_SIVAGURU.U(ME).pdf

Training made a impact in HVAC basics and many students planned to proceed further in this area as their Primary Canal

CHAIRPERSON.

most of the Students gave Positive feedback about the programme.

2.2. Sumlume



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For ONE WORLD INC

Lordbon . D. &

**Authorised Signatory** 



# **Excel MEP Institute**

#5, First Cross, Lalbagh Main Road, Near Subbaiah Circle, Bengaluru-560027

E-Mail: oneworldinc@gmail.com | Call:09886001720 / 09739933559

#### CENTRE FOR SKILLING AND TECHNICAL SUPPORT (CSTS)

#### **About Our Institute**

Having started in the year 1994 as Techademy, Excel MEP Institute has Trained & Successfully placed many Engineers & Diploma holders in the field of HVAC, Electrical, Plumbing (PHE) & Firefighting We train our students who are Graduate Engineers, Diploma Holders & ITI graduates in Design & Draughting of MEP Systems making them technically sound in the MEP domain by giving theoritical, Practical and Draughting skills.

#### **Course Offered:**

- HVAC
- ELECTRICAL
- PLUMBING
- FIRE FIGHTING
- REVIT MEP ( Jan 2017 )
- CLEAN ROOM DESIGNING

#### The main objectives of the courses at Excel MEP Academy are;

- To enhance the employability of engineering students.
- To enhance the standard of fresh engineering graduates so that they become acceptable to the industry.
- To cater to the needs of the industry.
- To create a platform where the students can work towards accessing the skills required to get into industry.
- To bridge the gap between industry and educational institutions.
- To provide both technical and soft skill to people to facilitate their employability.
- To meet the needs of unemployed and non-employable engineering graduates and to improve their communication skills.
- To reinforce the students skills and acquire industry-specific knowledge from trained faculty and experts from industries.
- To offer suitable candidates to different industries.
- To help young graduates to find jobs through appropriate training.