Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Date: 15.10.2017

Department of Automobile Engineering

Circular

The of Department of Automobile Engineering, BIHER glad to conduct on six days value added program on "***Automobile Engine Design***" from 28.10.2017 for 30 hours. Those who are interested to participate do register your name to the program coordinator.

Resource persons:

Dr.P.Naveenchandran
Prof. & Head
Dept. of Auto. Engg.
BIHER

Mr.C.Thamotharan
Associate Professor,
Dept. of Auto. Engg.
BIHER

Maximum no. of registration Allowed – 60

***First come first serve basis.**

Program Coordinator:
Mr.E.Raja
Asst. Professor
rajaaerospace@gmail.com

(HOD-Auto)

Professor & Head
Department of Automobile Engineering
BIST, Bharath University
Chennai - 600 073.

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Department of Automobile Engineering

Course on "Automobile Engine Design"

OBJECTIVES:

- To introduce Automobile fundamentals
- To introduce IC Engines
- To enable the students to understand the various particulars in Automobile
- To create confidence in exploring Automobile Engine Design

[DAY: 1]
MODULE 1 Automobile Fundamentals (5 Hrs)

[DAY: 2]
MODULE 2 Automobile IC Engines Fundamentals (5 Hrs)

[DAY: 3]
MODULE 3 Automobile IC Engine Design (5 Hrs)

[DAY: 4]
MODULE 4 Automobile IC Engine Construction & Working (5 Hrs)

[DAY: 5]
MODULE 5: Automobile IC Engine Troubleshooting (5 Hrs)

[DAY: 6]
Practical Session using Automobile Models **(5 Hrs)**

Department of Automobile Engineering
Value Added Course - Automobile Engine Design

PARTICIPANTS LIST

S.NO	REG.NO	NAME	DEPARTMENT
1	U14AM001	Abdul Khadar Basha Mohammed	Automobile
2	U14AM002	Abhishek Singh Kushwaha	Automobile
3	U14AM006	Andrew Aggasi.C.	Automobile
4	U14AM007	Anthony Raj.J	Automobile
5	U14AM008	Aravind Reddy.M	Automobile
6	U14AM010	Chadunupalli Srikanth	Automobile
7	U14AM011	Choudhry Abrar Ahmed Hazrat Ali	Automobile
8	U14AM015	Gulshan Kumar	Automobile
9	U14AM016	Haaris Satheesh	Automobile
10	U14AM017	Hariom Parmar	Automobile
11	U14AM020	Kanugonda Hari Kiran Reddy	Automobile
12	U14AM023	Lenin .R	Automobile
13	U14AM025	Mohamed Ansar.S	Automobile
14	U14AM027	Muthu Manikkamoorithy.R	Automobile
15	U14AM028	Naveen Kumar .V	Automobile
16	U14AM033	Prithiviraj K.	Automobile
17	U14AM035	Raghavendran . S.D	Automobile
18	U14AM036	Raktim Pal	Automobile
19	U14AM038	Reuban David.D	Automobile
20	U14AM042	Sibbala Nikhil Ram	Automobile

21	U14AM047	Sutharsan.A	Automobile
22	U14AM050	Yatish Kumar	Automobile
23	U14ME005	Anbalagan.T.	Mechanical
24	U14ME009	Banepalli Rajsrikanth	Mechanical
25	U14ME014	Gaddam Vikram	Mechanical
26	U14ME018	Jitendra Kumar	Mechanical
27	U14ME019	Jonar Dhan Chakma	Mechanical
28	U14ME022	Karthick.V	Mechanical
29	U14ME026	Mohamed Mudassir	Mechanical
30	U14ME029	Nishanth .R	Mechanical
31	U14AM031	Prabu.V	Mechanical
32	U14AM032	Prince Joshu Raja.L	Mechanical
33	U14AM034	Purushothaman.R	Mechanical
34	U14ME037	Ratnadeep Mukherjee	Mechanical
35	U14ME040	Rohit Kumar	Mechanical
36	U14ME041	Sairam Akkireddy	Mechanical
37	U14ME043	Sonayala Sai Ravi Teja	Mechanical
38	U14ME044	Sudharsanan.M	Mechanical
39	U14ME046	Sushil Kumar Sahu	Mechanical
40	U14ME048	Thaarun Prakash .M	Mechanical
41	U14ME053	Kishore Kumar .K.S	Mechanical
42	U14MT004	Amit Kumar .P	Mechatronics
43	U14MT012	Deva Kumar.R	Mechatronics
44	U14MT021	Karthick .D	Mechatronics
45	U14MT024	Mohamed Abuthahir	Mechatronics

46	U14MT030	Paylla Pavan Reddy	Mechatronics
47	U14MT039	Rishab Chowdary.P	Mechatronics
48	U14MT045	Susan Thapa	Mechatronics
49	U14MT051	Yogabalan .C	Mechatronics

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BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
No.173, Agharam Road, Selaiyur, Chennai - 600 073.

• *Department of Automobile Engineering*

Participation Certificate

This is to certify that

DEVANATHA M

*has attended the value added program on "**Automobile Engine Design**" organized by Department of Automobile Engineering, Bharath Institute of Higher Education and Research, Chennai, on 28-10-17 to 1-11-17.*

Mr.E.Raja
Co-ordinator

Dr.P.Naveenchandran
Prof. & Head

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as deemed to be university under section 3 of UGC Act 1956, vide notification No.F.9-5/2000-U.3)

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Department of Mechanical Engineering

Academic year: 2017-2018

Name and code number of the value added course offered: Automobile Engine Design

Semester: 7

Batch No: 2014

Period of Batch: Nov 2017

Staff Co ordinator: Mr. E. Raja

Staff Handling: Dr. P. Naveen Chandiran

STUDENT FEEDBACK

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very good	Good	Fair	Satisfactory
1	Course content	✓				
2	Skill development	✓				
3	Motivation	✓				
4	Regularity and punctuality of teacher	✓				
5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention		✓			
8	Outcome	✓				
9	Other suggestions		✓			

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STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Department of Automobile Engineering

Academic year: 2017-2018

Name and code number of the value added course offered: Automobile Engine Design

Semester: 7

Batch No: 2014

Period of Batch: NOV 2017

Staff Co ordinator: Mr. E. Raja

Staff Handling: Dr. P. Naveenchandiran

STUDENT FEEDBACK

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very good	Good	Fair	Satisfactory
1	Course content	✓				
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5	Coverage of syllabus	✓				
6	Interaction		✓			
7	Individual attention	✓				
8	Outcome	✓				
9	Other suggestions		✓			

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH

(Declared as deemed to be university under section 3 of UGC Act 1956, vide notification No.F.9-5/2000-U.3)

STUDENT FEEDBACK FORM FOR VALUE ADDED COURSES

Department of Mechatronics

Academic year: 2017-2018

Name and code number of the value added course offered: Automobile Engine Design

Semester: 7

Batch No: 2014

Period of Batch: Nov. 2017

Staff Co ordinator: Mr. E. Raja

Staff Handling: Dr. P. Naveen Chandiran

STUDENT FEEDBACK

Dear Student,

You are required to give your feedback on the following aspects. Please tick in the respective column.

S.No	Criteria	Rating				
		Excellent	Very good	Good	Fair	Satisfactory
1	Course content	✓				
2	Skill development		✓			
3	Motivation			✓		
4	Regularity and punctuality of teacher	✓				
5	Coverage of syllabus		✓			
6	Interaction			✓		
7	Individual attention		✓			
8	Outcome	✓				
9	Other suggestions		✓			

Department of Automobile Engineering

Value Added Course - Automobile Engine Design- conducted by Dr. P. Naveenchandran on 28.10.2017

SNAP SHOT

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INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

Date: 25.10.2017

Department of Mechatronics

Circular

The Department of Mechatronics, BIHER is glad to conduct a 5 - day Value Added Program on **"Hyper mesh/Hyper View Introduction"** dated from 20.11.2017 to 24.11.2017 for a period of 25 hours. Those who are interested to participate do register your name with the program coordinator mentioned below.

Resource persons:

Dr.P.Sengottuvel,
Professor,
BIHER

Mr. Uday Shankar Prabhu
CEO,
CAD/CAM/CAE Solutions,
Royapuram, Chennai.

***First come first serve basis.**

Program Coordinator:
Mr.J.Dhanasekar
Assistant Professor
Mr.P. Jai Rajesh
Assistant Professor,
E-Mail: jdhanasekar81@gmail.com/ jairajesh2008@gmail.com
Mobile: 9841259514 / 7299956395

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BHARATH INSTITUTE OF SCIENCE & TECHNOLOGY
Selaiyur, Chennai-600 073. India
MECHATRONICS

Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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Department of Mechatronics

Hyper mesh/Hyper View Introduction

OBJECTIVES:

This is an introductory course using Hyper Mesh to create and set up finite element models for analysis. A combination of lectures and exercises will familiarize students to the Hyper Mesh environment,its processes, and the suitable tools needed .This course is combined with the Hyper View introductory course too.

[DAY: 1]

MODULE 1: **Introduction to Hyper Mesh (5 Hrs)**

Basic interaction with Hyper Mesh and Hyperview - User interface- Opening/saving files - Working with panels - Model organization - Display control - Shell meshing - Auto meshing – Meshing on surface geometry- Checking and editing mesh - Batch meshing

[DAY: 2]

MODULE II: Preparing Models for Analysis (5 Hrs)

Creating boundary conditions, Formatting for solvers, Preparing geometry for meshing-Repairing surface topology, Mid surfaces, Disfeaturing models ,Refining surface topology

[DAY: 3]

MODULE III: Creating Hexa and Penta Mesh (5 Hrs)

Creating & Editing solid geometry, Creating hex mesh with the solid map panel

[DAY: 4]

MODULE IV: Tetra Meshing(5 Hrs)

- Method 1 – Standard tetra mesh
- Method 2- Volume tetra mesh
- Method 3 – Quick tetra mesh

[DAY: 5]

MODULE V: Assemblies (5 Hrs)
Welding and Swapping Parts

- Spot Connectors
- Area Connectors
- Bolt Connectors
- Part Connectors

Department of Mechatronics

Value Added Course – Hyper Mesh/ Hyper View Introduction

Schedule: 20/11/2017 to 24/11/2017

Sl. No	Date	MODULE	TOPIC
1	20/11/2017	MODULE 1	Introduction to Hyper Mesh
2	21/11/2017	MODULE 1I	Preparing Models for Analysis
3	22/11/20217	MODULE 1II	Creating Hexa and Penta Mesh
4	23/11/2017	MODULE 1V	Tetra Meshing
5	24/011/2017	MODULE V	Assemblies

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Department of Mechatronics

Value Added Course - Hyper Mesh/ Hyper View Introduction

PARTICIPANTS LIST

S.No	Reg.No	Name	Department
1.	U16AM001	RAMACHANDRAN M	Automobile Engineering
2.	U16AM002	LIBIN BOBBY	Automobile Engineering
3.	U16AM005	VASANTHKUMAR R	Automobile Engineering
4.	U16AM014	KARMUGILAN V	Automobile Engineering
5.	U16AM008	PALAPANDALA	Automobile Engineering
6.	U16AM012	MOHAMED IMTHIYAZ	Automobile Engineering
7.	U16AM017	AMAL PHILIP GEORGE	Automobile Engineering
8.	U16MT001	PRADEEPAN S	Mechatronics
9.	U16MT002	RAAHUL GANESH R	Mechatronics
10.	U16MT003	DINESH J	Mechatronics
11.	U16MT004	SRINATH B	Mechatronics
12.	U16MT005	DHANASEKAR R	Mechatronics
13.	U16MT006	GOUTHAM M	Mechatronics
14.	U16MT007	SATHIYASEELAN S	Mechatronics

15.	U16MT008	RAKESH P	Mechatronics
16.	U16MT009	ABDUL FAHEEM S	Mechatronics
17.	U16MT702	CHIRANJEEVI	Mechatronics
18.	U16MT703	VIGNESH	Mechatronics
19.	U16MT704	AJITH	Mechatronics
20.	U19ME011	ANTONY MICHEAL RAJ D	Mechanical Engineering
21.	U19ME014	ASHKIN JEBA G	Mechanical Engineering
22.	U19ME016	BAJJANAGARI NICHITH REDDY	Mechanical Engineering
23.	U19ME040	GOKUL R	Automobile Engineering
24.	U19ME055	K PRANAY	Automobile Engineering
25.	U19ME059	KANAPARTHI SAI MANEESH CHOWDARY	Automobile Engineering
26.	U19ME060	KANDUKURI VENKATA RAMANA	Automobile Engineering
27.	U19ME062	KANKANALA KEERAVANI	Mechanical Engineering
28.	U19ME069	KOTHAPALLI SAI RAM	Mechanical Engineering
29.	U19ME070	KOUDAGANI VISHNU	Mechanical Engineering
30.	U19ME072	KUMMITHA NARENDRA REDDY	Mechanical Engineering
31.	U19ME118	RAPAKA DAVID GABRIEL	Mechanical Engineering
32.	U19ME122	RITHISH G	Mechanical Engineering
33.	U19ME132	TARUN REDDY SAMA	Mechanical Engineering
34.	U19ME140	VANGALA NAVEEN KUMAR REDDY	Mechanical Engineering
35.	U19ME141	VEERAMALLU JSG AADITHYAA	Mechanical Engineering
36.	U19ME142	VELPURI HEMANTH KUMAR	Mechanical Engineering

37.	U19ME145	VIRIGINENI HARINADH	Mechanical Engineering
38.	U19ME146	XAVIER SANTHOSH P	Mechanical Engineering
39.	U19ME069	KOTHAPALLI SAI RAM	Mechanical Engineering
40.	U16ME082	HARISH	Mechanical Engineering
41.	U16ME087	ANAND KUMAR	Mechanical Engineering
42.	U16ME093	MACHUNURU PRASAD KUMAR	Mechanical Engineering
43.	U16ME094	GOPAL KUMAR	Mechanical Engineering
44.	U16ME098	PRAJEESH S NAIR	Mechanical Engineering
45.	U16ME100	NAGIREDDY AJAYKUMAR	Mechanical Engineering
46.	U16ME101	VIJAY	Mechanical Engineering
47.	U16ME104	MULLAGURA BHARATH KUMAR	Mechanical Engineering
48.	U16ME105	CHALLA CHARANKUMAR	Mechanical Engineering
49.	U16ME106	RAJEEV KUMAR	Mechanical Engineering
50.	U16ME107	MANOJ	Mechanical Engineering
51.	U16ME113	PYNKHLAINBORLANG	Mechanical Engineering
52.	U16ME115	GUNA	Mechanical Engineering
53.	U16ME119	PALAPALA	Mechanical Engineering

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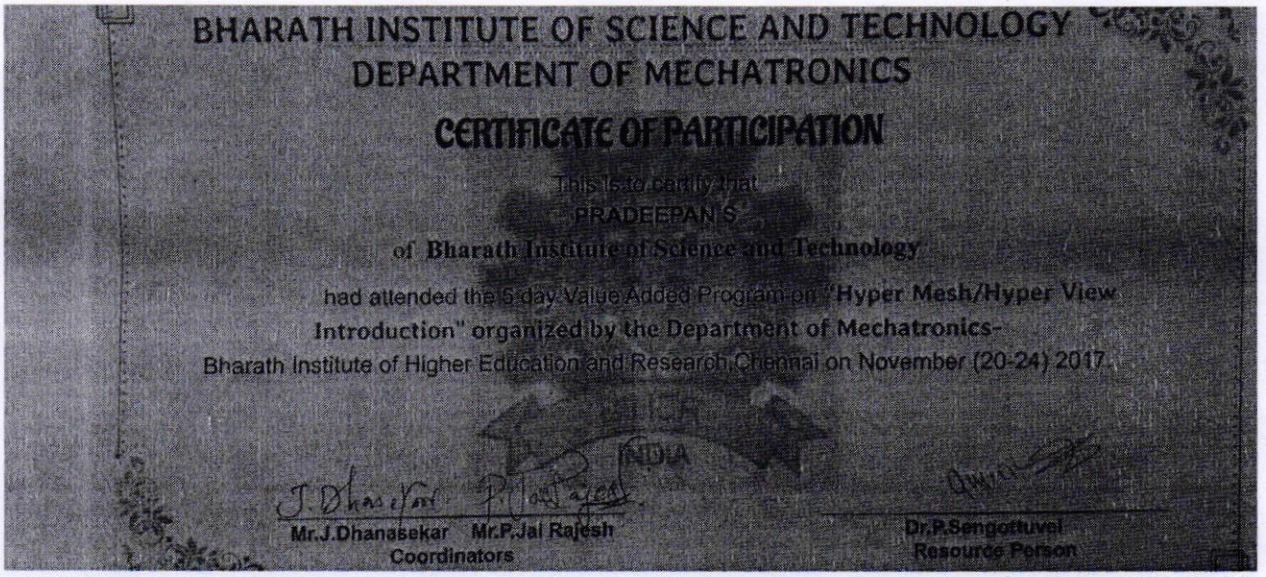
Department of Mechatronics

Value Added Course – Hyper Mesh/ Hyper View Introduction

Mr. Uday Shankar Prabhu's addressing the students regarding the programme.

Model Certificate



BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPARTMENT OF MECHATRONICS

CERTIFICATE OF PARTICIPATION

This is to certify that
PRADEEPAN S
of **Bharath Institute of Science and Technology**
had attended the 5 day Value Added Program on "**Hyper Mesh/Hyper View Introduction**" organized by the Department of Mechatronics-Bharath Institute of Higher Education and Research Chennai on November (20-24) 2017.

Mr.J.Dhanasekar Mr.P.Jai Rajesh
Coordinators

Dr.P.Sengottuvel
Resource Person

Feedback Form

Criteria	Strongly Agree(3)	Agree (2)	Disagree (1)
Training was relevant to my needs	✓		
Materials Provided were useful	✓		
Length of training program was sufficient	✓		
Contents was well organized		✓	
Question were engaged	✓		
Instruction were clear and understandable	✓		
Training met my expectation		✓	
Presentation were effective	✓		

Feedback Form

Criteria	Strongly Agree(3)	Agree (2)	Disagree (1)
Training was relevant to my needs	✓		
Materials Provided were useful	✓		
Length of training program was sufficient			
Contents was well organized	✓		
Question were engaged		✓	
Instruction were clear and understandable		✓	
Training met my expectation	✓		
Presentation were effective	✓		

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Date: 13.10.2017

Department of Mechanical Engineering

Circular

The of Department of Mechanical Engineering, BIHER glad to conduct on six days value added program on "***Computational Fluid Dynamics***" from 27.11.2017 for 30 hours. Those who are interested to participate do register your name to the program coordinator.

Resource persons:

Dr.D.Ravi,
Associate Professor,
BIHER

Dr.K.Durairaj ,
Works Manager,
AVADI TANK Factory,
Avadi, Chennai.

Maximum no. of registration Allowed – 60

***First come first serve basis.**

Program Coordinator:

Mr.R J Golden Renjith Nimal
Associate Professor
Mr.R.Hariharan
Assistant Professor,
E-Mail:goldenrenjith.mech@bharathuniv.ac.in

hariharan.mech@bharathuniv.ac.in

Department of Mechanical Engineering
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
Chennai-600 073

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Department of Mechanical Engineering

One Week Value added Program on "Computational Fluid Dynamics"

27th Nov to 2nd Dec 2017

Program Schedule

Date	Morning Session (9 AM – 12 PM)	Afternoon Session (1:30 PM – 3:30 PM)
27 – 11 – 2017 (Monday)	*Program Inauguration* **Dr.D.Ravi**,Associate Professor, BIHER *Introduction to CFD*	**Dr.K.Durairaj** , Works Manager, AVADI TANK Factory, Avadi, Chennai. *Governing Equations and Boundary Conditions*
28 – 11 – 2017 (Tuesday)	**Dr.K.Durairaj** , Works Manager, AVADI TANK Factory, Avadi, Chennai. *Derivation of finite difference equations*	**Dr.D.Ravi**, Professor, BIHER *Finite Volume Methods For Diffusion*
29 – 11 – 2017 (Wednesday)	**Dr.D.Ravi**, Associate Professor, BIHER *Volume Method for Convection Diffusion*	**Dr.K.Durairaj** , Works Manager, AVADI TANK Factory, Avadi, Chennai. *properties of discretization schemes – Conservativeness, Boundedness, Transportiveness, Hybrid, Power-law, QUICK Schemes*
30 – 11 – 2017 (Thursday)	**Dr.K.Durairaj** , Works Manager, AVADI TANK Factory, Avadi, Chennai. *FLOW PROCESSES: FINITE VOLUME METHOD*	**Dr.D.Ravi**, Professor, BIHER *Pressure based algorithms, SIMPLE, SIMPLER & PISO algorithms*
01 – 12– 2017 (Friday)	**Dr.D.Ravi**, Associate Professor, BIHER *Representation of the pressure gradient term and continuity equation – Staggered grid – Momentum equations – Pressure and Velocity corrections*	**Dr.K.Durairaj** , Works Manager, AVADI TANK Factory, Avadi, Chennai. *Pressure Correction equation, SIMPLE algorithm and its variants. Turbulence models, mixing length model, Two equation (k-Є) models – High and low Reynolds number models*

02 – 12 – 2017 (Saturday)	**Dr.D.Ravi**, Associate Professor, BIHER *Practical Session using software*	*Quiz/ Feedback / valedictory Session*

Program Coordinator:
Mr.R J Golden Renjith Nimal
Associate Professor
Mr.R.Hariharan
Assistant Professor,
E-Mail:goldenrenjith.mech@bharathuniv.ac.in
hariharan.mech@bharathuniv.ac.in

Department of Mechanical Engineering
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
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Department of Mechanical Engineering

Computational Fluid Dynamics

OBJECTIVES:

- To introduce Governing Equations of viscous fluid flows
- To introduce numerical modeling and its role in the field of fluid flow and heat transfer
- To enable the students to understand the various discretization methods, solution procedures and turbulence modeling.
- To create confidence to solve complex problems in the field of fluid flow and heat transfer by using high speed computers.

[DAY: 1]

MODULE 1 Governing Equations and Boundary Conditions (5 Hrs)
Basics of computational fluid dynamics – Governing equations of fluid dynamics – Continuity, Momentum and Energy equations – Chemical species transport – Physical boundary conditions – Time-averaged equations for Turbulent Flow – Turbulent–Kinetic Energy Equations – Mathematical behaviour of PDEs on CFD – Elliptic, Parabolic and Hyperbolic equations.

[DAY: 2]

MODULE II Finite Difference and Finite Volume Methods For Diffusion (5 Hrs)
Derivation of finite difference equations – Simple Methods – General Methods for first and second order accuracy – Finite volume formulation for steady state One, Two and Three - dimensional diffusion problems –Parabolic equations – Explicit and Implicit schemes – Example problems on elliptic and parabolic equations – Use of Finite Difference and Finite Volume methods.

[DAY: 3]

MODULE III Finite Volume Method for Convection Diffusion (5 Hrs)
Steady one-dimensional convection and diffusion – Central, upwind differencing schemes properties of discretization schemes – Conservativeness, Boundedness, Transportiveness, Hybrid, Power-law, QUICK Schemes.

[DAY: 4]

MODULE IV FLOW PROCESSES: FINITE VOLUME METHOD (5 Hrs)
Discretisation of incompressible flow equations – Pressure based algorithms, SIMPLE, SIMPLER & PISO algorithms

[DAY: 5]

MODULE V Calculation Flow Field by FVM (5 Hrs)
Representation of the pressure gradient term and continuity equation – Staggered grid – Momentum equations – Pressure and Velocity corrections – Pressure Correction equation, SIMPLE algorithm and its variants. Turbulence models, mixing length model, Two equation (k-Є) models – High and low Reynolds number models

[DAY: 6]

Practical Session using software **(5 Hrs)**

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Department of Mechanical Engineering

Value Added Course - CFD

PARTICIPANTS LIST

S.No	Reg.No	Name	Department
1.	U16AM007	SUNDARESWARAN	Automobile Engineering
2.	U16AM008	PALAPANDALA	Automobile Engineering
3.	U16AM009	THAMIM ANSARI	Automobile Engineering
4.	U16AM010	JAI KUMAR	Automobile Engineering
5.	U16AM012	MOHAMED IMTHIYAZ	Automobile Engineering
6.	U16AM015	PARIMI SAI SURYA VAMSI	Automobile Engineering
7.	U16AM017	AMAL PHILIP GEORGE	Automobile Engineering
8.	U16MT010	SAKTHI	Mechatronics
9.	U16MT011	MELVINE ROHAN	Mechatronics
10.	U16MT014	SARATHKUMAR	Mechatronics
11.	U16MT015	SOMENDRAN	Mechatronics
12.	U16MT018	RATHISH KRISHNAN	Mechatronics
13.	U16MT501	MUGILAN	Mechatronics
14.	U16MT502	VIGNESHWAR	Mechatronics
15.	U16MT503	KARUPHIN KAWIN J	Mechatronics
16.	U16MT701	CHANDRASEKAR	Mechatronics
17.	U16MT702	CHIRANJEEVI	Mechatronics

18.	U16MT703	VIGNESH	Mechatronics
19.	U16MT704	AJITH	Mechatronics
20.	U16ME002	DINESH KUMAR	Mechanical Engineering
21.	U16ME011	AJITH KUMAR	Mechanical Engineering
22.	U16ME012	MOHANRAJ	Mechanical Engineering
23.	U16AM501	MOHAMED FARIZ	Automobile Engineering
24.	U16AM502	GOPINATH	Automobile Engineering
25.	U16AM701	BISANI YASWANTH SAI	Automobile Engineering
26.	U16AM702	MUHAMED ASHARUDEEN	Automobile Engineering
27.	U16ME029	DINESH KUMAR	Mechanical Engineering
28.	U16ME031	ZHAKIRHUSSAIN	Mechanical Engineering
29.	U16ME033	SHERIN T	Mechanical Engineering
30.	U16ME035	PARTHAN	Mechanical Engineering
31.	U16ME041	SUVODEEP	Mechanical Engineering
32.	U16ME049	MOHAMED ABDULLAH	Mechanical Engineering
33.	U16ME055	DEEPAK	Mechanical Engineering
34.	U16ME056	YOGESH	Mechanical Engineering
35.	U16ME059	JEFRON	Mechanical Engineering
36.	U16ME062	DANIEL	Mechanical Engineering
37.	U16ME066	VASANTH KUMAR	Mechanical Engineering
38.	U16ME078	KAMASANI	Mechanical Engineering
39.	U16ME080	MAJID	Mechanical Engineering

40.	U16ME082	HARISH	Mechanical Engineering
41.	U16ME087	ANAND KUMAR	Mechanical Engineering
42.	U16ME093	MACHUNURU PRASAD KUMAR	Mechanical Engineering
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52.	U16ME115	GUNA	Mechanical Engineering
53.	U16ME119	PALAPALA	Mechanical Engineering

Mr. R.T. Golden Renjith Nimal

Mr. R. Hariharan

Department of Mechanical Engineering
BHARATH INSTITUTE OF HIGHER EDUCATION AND RESEARCH
Chennai-600 073

Feedback Form

* Required

Email address *

Harish124@gmail.com

Name of the Participant *

Use Capital Letters , It will be Printed In Certificate

Harish (U16ME082)

Name of the Institution *

BIHER

Content of the Presentation *

- (●) More than Expected
- ( ) As Expected
- ( ) Satisfactory
- ( ) Not Satisfactory

Audio/ Video Quality *

	1	2	3	4	5	
Very Poor	( )	( )	( )	( )	(●)	Very Good

Bharath Institute of Higher Education and Research

DEPARTMENT OF MECHANICAL ENGINEERING

Certificate of Participation

This is to certify that

HARISH

of

Bharath Institute of Higher Education and Research

has attended the value added program on "Computational Fluid Dynamics" organized by the Department of Mechanical Engineering, Bharath Institute of Higher Education and Research, Chennai on November (27-30), December (1-2), 2017.

Mr.R J Golden Renjith Nimal **Mr.R.Hariharan**
Coordinators

Dr.D.Ravi
Resource Person

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Department of Mechanical Engineering

Value Added Course - CFD - SNAP SHOT

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Date: 22.11.2017

Department of Mechatronics

Circular

The Department of Mechatronics, BIHER is glad to conduct a 5 - days Value Added Program on **"Certificate Course on Computational Fluid Dynamics"** dated from 27.11.2017 to 01/12/2017 for a period of 30 hours. Those who are interested to participate do register your name with the program coordinator mentioned below.

Resource persons:

Dr.P. Sengottuvel,
HOD & Professor,
BIHER

Mr. MOHAMMED BASHA
Caddam Technologies Pvt Ltd
Tambaram West
Chennai.

Maximum No. of registration Allowed – 53

***First come first serve basis.**

Program Coordinator:
Mrs.V.G. Vijaya
Assistant Professor
Mr. Jai Rajesh
Assistant Professor

E-Mail: vijayasaravanan84@gmail.com
Mobile: 8870136732

Dept. of Mechatronics
Bharath Institute of Science & Technology
Chennai - 73
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Department of Mechatronics

CERTIFICATE COURSE ON COMPUTATIONAL FLUID DYNAMICS

Objectives:

The course aims at giving the students will understand what CFD is and its significance. Also learn what the Navier-Stokes equations are and how they're derived.

- CFD - An introduction, necessity, advantages, CFD modeling process
- Deriving and understanding the Navier Stokes equations
  - Substantial derivative
  - Continuity equation
  - Momentum equation
  - Energy equation
- Significance of Reynold's number in the NS equations

[DAY:1] MODULE I (6 Hrs)

Introduction to CFD using MATLAB

[DAY: 2] MODULE II (6 Hrs)

Introduction to CFD using OpenFOAM

[DAY: 3] MODULE III (6 Hrs)
Introduction to OpenFOAM Development

[DAY: 4] MODULE IV (6 Hrs)

Introduction to GUI based CFD using ANSYS FLUENT

[DAY: 5] MODULE V (6 Hrs)

GUI based CFD using ANSYS FLUENT

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Model Certificate

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CERTIFICATE OF PARTICIPATION

This is to certify that

Prof./Dr./Mr./Ms. .....

Of

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY,BIHER,CHENNAI.

He /She has Participated in a Value Added Program on "Certificate Course on Computational Fluid Dynamics" organized by the School of Mechanical Sciences , Department of Mechatronics , on 27th November to 01st December 2017.

BIHER INDIA

Coordinator	Convener	Dean-Engineering
Mrs. V.G.Vijaya	Dr.P.Sengottuvel	Dr.J.Hameed Hussain

Dept. of Mechatronics Bharath Institute of Science & Technology Chennai - 73 BIHER

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Department of Mechatronics

Value Added Course - Certificate Course on Computational Fluid Dynamics

Participants List

S.No	Reg.No	Name	Department
1.	U17MT056	SURYA PRAKASH	Mechatronics
2.	U17MT055	YOKESH RAJ	Mechatronics
3.	U17MT054	VASANTH	Mechatronics
4.	U17MT053	GOKULAKRISHNAN	Mechatronics
5.	U17MT052	SATHISH KUMAR	Mechatronics
6.	U17MT051	BOLLEDDU RAVI TEJA	Mechatronics
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18.	U17MT036	SUSHIL KUMAR	Mechatronics

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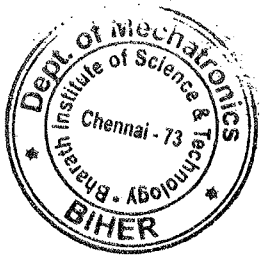
52.	U16MT005	DHANASEKAR R	Mechatronics
53.	U16MT006	GOUTHAM M	Mechatronics



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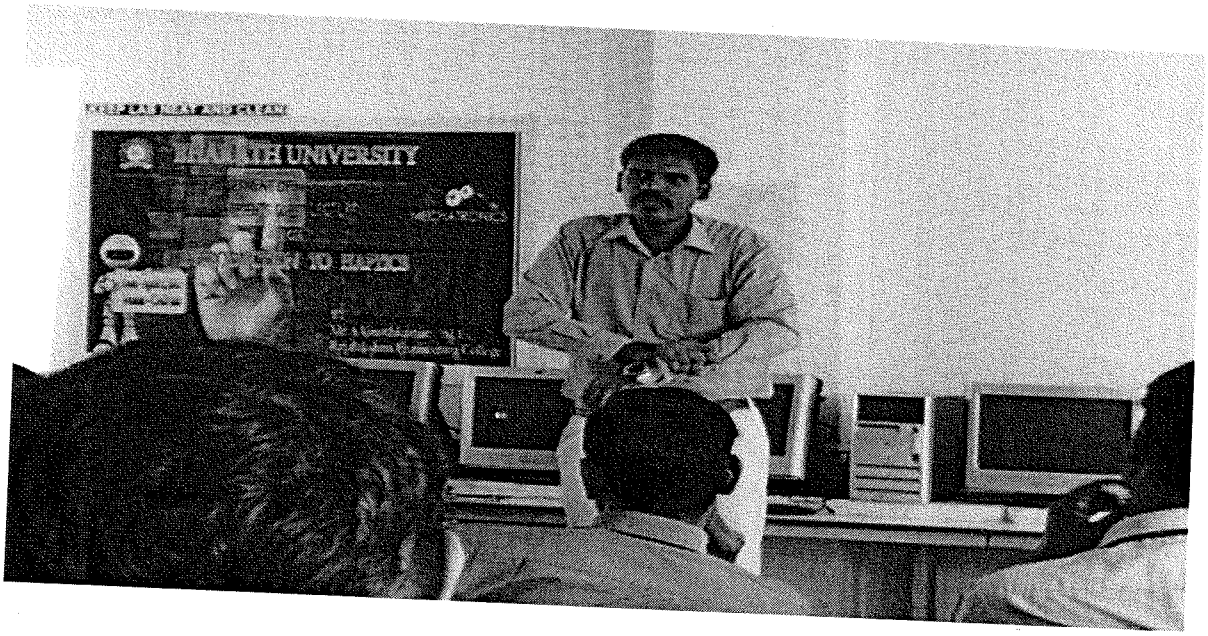
Department of Mechatronics

Value added course -Certificate Course on Computational Fluid Dynamics



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Date: 25.10.2017

Department of Mechatronics

CIRCULAR

The Department of Mechatronics, BIHER is glad to conduct a 5 - days Value Added Program on **"Course on Automobile Engine Design"** dated from 30/10/2017 to 03/11/2017 for a period of 30 hours. Those who are interested to participate do register your name with the program coordinator mentioned below.

Resource persons:

Dr.P.Sengottuvel,
Professor,
BIHER

Mr. MAGHESH
Caddam Technologies Pvt Ltd
Tambaram West
Chennai .
Maximum No. of registration Allowed – **54**

***First come first serve basis.**

Program Coordinator:
Mrs.V.G. Vijaya
Assistant Professor
Mrs.G. Vasumathi
Assistant Professor,
E-Mail: vijayasaravanan84@gmail.com
Mobile: 8870136732

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Department of Mechatronics

Course on Automobile Engine Design

OBJECTIVES:

This course is to present a problem oriented in depth knowledge of automobile engine component design. To address the underlying concepts and methods behind automobile engine component design.

[DAY: 1]

MODULE I

Learn how to build complex data models **(6 Hrs)**

[DAY: 2]

MODULE II

Explore data classification and regression **(6 Hrs)**

[DAY: 3]

MODULE III

clustering methods (6 Hrs)

[DAY: 4]

MODULE IV

popular machine learning algorithms **(6 Hrs)**

[DAY: 5]

MODULE V : popular machine learning algorithms, (6 Hrs)

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CERTIFICATE OF PARTICIPATION

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Of

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY,BIHER,CHENNAI.

He /She has Participated in a Value Added Program on "Course on Automobile Engine Design" organized by the School of Mechanical Sciences , Department of Mechatronics , on 30th October to 03rd November 2017.

Coordinator	Convener	Dean-Engineering
Mrs. V.G.Vijaya	Dr.P.Sengottuvel	Dr.J.Hameed Hussain

Dept of Mechatronics
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Department of Mechatronics

Value Added Course - Course on Automobile Engine Design

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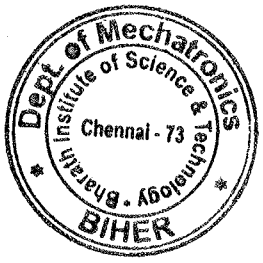

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Department of Mechatronics

Value added course - Course on Automobile Engine Design

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