INTEGRAL UNIVERSITY

Ahmad Faiz Minai <afminai@iul.ac.in>

Fwd: A Brief Report on Six Weeks (30 Hours) Online Value Added Course on "Electric Vehicle: Technology of the Present and Future" Organized by Department of Electrical Engineering from 22 November 2021 To 31 December 2021

1 message

Head Elec. & Elec. <headee@iul.ac.in> Thu, Mar 24, 2022 at 3:20 PM
To: IT HelpDesk Integral University <ithelpdesk@iul.ac.in>, IT HelpDesk IU <ithd@iul.ac.in>, communications@iul.ac.in
Cc: ajansari <ajansari@iul.ac.in>, Mohammad Atif Siddiqui <atifsiddiqui@iul.ac.in>, Mohammed Arifuddin Mallick <mamallick@iul.ac.in>, mksiddiqui <mksiddiqui@iul.ac.in>
Bcc: afminai@iul.ac.in

Please circulate this report through Communication Cell

A Brief Report on Six Weeks (30 Hours) Online Value Added Course on "Electric Vehicle: Technology of the Present and Future" Organized by Department of Electrical Engineering from 22 November 2021 To 31 December 2021

Dear All

Department of Electrical Engineering, Integral University Lucknow organized a 6 weeks online value-added course on Electric Vehicle: Technology of the Present and Future from 22nd November 2021 to 31st December 2021. The course was designed for UG and PG Students for all streams of education. A number of students from various branches registered in the course. The course was successfully convened by Dr. Monauwer Alam, Head, Department of Electrical Engineering and conducted by Prof. M. A. Mallick, Dr. A. J. Ansari, Dr. Mohd. Khursheed and Dr. M. Atif Siddiqui, all from Department of Electrical Engineering, Integral University. There was a daily one hour interactive training session through ILI, Google meet with Quiz on the weekend. The students attended the training with dedication. The distribution of e-Certificate was based on student's attendance and performance in the quizzes and attainment of at least overall 30% marks.

Key highlights of the training

- It was an online interactive training under the skill development programs of Department
- Total 100 students from various branches registered for the course.
- Zero fees for the entire period of the training.
- Modeling and Simulation of Electric Vehicle on MATLAB Simulink
- 51 students successfully completed the course and received an e-Certificate.

The Training Sessions were addressed by the following resource persons

Module I,III	 **Prof. Mohammad ArifuddinMallick,** EE, IU	Introduction: Sustainable Transportation, A brief history of HEVs, Architectures of HEVs, Challenges and Key Technology of HEVs: Hybridization of the Automobile, Vehicle Basics Basics of the EV, Basics of the HEV, Basics of Plug-In Hybrid Electric Vehicle (PHEV) Basics of Fuel Cell Vehicles (FCVs), Solar hybrid EVs
		Batteries, Ultra-capacitors, Fuel Cells, Controls: Introduction, Different batteries for EV Battery Characterization, Comparison of Different Energy Storage Technologies for HEVs, Battery Charging Control, Charge Management Storage Devices, System Flywheel, Hydraulic, Fuel & Hybrid Fuel Cell Energy Storage & Battery Management System
Module II, VI	 **Dr. Asif Jamil Ansari,** EE, IU	HEV Fundamentals: Introduction, Vehicle Model & Performance, EV Powertrain Component Sizing Vehicle-to-Grid Technology, Power Electronics in HEVs: Switching, AC-DC, DC-AC conversion Electronic devices and circuits used for control and distribution of electric power,Thermal Management of HEV Power Electronics
		Modeling of EV: Introduction to MATLAB Simulink, Basic Modeling and Simulation, Modeling and Simulation of EV - I

		Modeling and Simulation of EV - II
Module IV	 **Dr.MohdKhursheed,** EE, IU	Electric Motors in EVs/HEVs: BLDC motors, Induction Motor Permanent Magnet Motor Drives Switched Reluctance Motors Speed Sensors and Current Sensors used in EVs
Module V	 **Dr. Mohammad Atif Siddiqui,** EE, IU	Need of controllers, Controllers used in EVs/HEVs Types of controllers Techniques used in controllers, Merits and demerits

Time-Table

Day/Period	I 9:00-10:00	II 10:00-11:00	III 11:00-12:00	IV 12:00-1:00	V 1:00-2:00	V 1:00-2:00	VI 3:00-4:00
Monday	--------	--------	--------	--------	--------	--------	Lecture Through Google Meet
Tuesday	--------	--------	--------	--------	--------	--------	Lecture Through Google Meet
Wednesday	--------	--------	--------	--------	--------	--------	Lecture Through Google Meet
Thursday	--------	--------	--------	--------	--------	--------	Lecture Through Google Meet
Friday	--------	--------	--------	--------	--------	--------	Lecture Through Google Meet

Sample Certificate

INTEGRAL UNIVERSITY
LUCKNOW (INDIA)

INSPIRING EXCELLENCE

Certificate Number: IU/EED/EEV-21/61f9321a-2d24-4fc5-a969-03c88b3b00f3

Certificate of Completion

This is to certify that Mr./Ms. Abdul Rahman Ahmad (ID number 1800100921)

has successfully
completed the Six Weeks Online Value Added Course (VAC) on

EEV-21-01 ELECTRIC VEHICLE: Technology of the Present and Future

(Conducted from 22 November 2021 to 31 December 2021)
Organized by
Department of Electrical Engineering Integral University Lucknow
Under the aegis of Human Resources and Development (HRDC) & Department Quality Assurance Cell (DQAC)
Issue date: 15-01-2022

Dr. Monauwer Alam	Dr. Mohd. Arifuddin Mallick	Dr. Asif Jamil Ansari	Dr. Mohd. Khursheed	Dr. Mohd. Atif Siddiqui
Convener Head & Professor, EED Integral University, Lucknow	Coordinator Professor, EED Integral University, Lucknow	Coordinator Asso. Professor, EED Integral University, Lucknow	Coordinator Asso. Professor, EED Integral University, Lucknow	Coordinator Asstt. Professor, EED Integral University, Lucknow

With regards

Dr. Monauwer Alam

Head, Electrical Engg. Deptt.
Integral University, Lucknow