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OFFICE OF THE REGISTRAR
NOTICE

DIT UNIVERSITY
IMAGINE ASPIRE ACHIEVE

Ref: REG – 358379 – CDC/VAT-2021-22-(TB)

Date: 10th February 2022.

Subject: Schedule for Technical Training – Proteus

Attention: Students of B.Tech 4th& 6th Semester (ECE & EE Students)

The students are hereby informed that the Technical Training – Proteus will be held from 14th **February 2022 to 25th February 2022** for the students of B.Tech 4th & 6th Semester (ECE & EE).

Note: It is mandatory for above mentioned students to attend the training.

Dr. Vandana Suhag
Registrar

Registrar
DIT University, Dehradun

To:

- All Deans / Directors
- HoDs
- Head CDC

With the request to bring the above to the notice of the students

Copy to:

- Chairman
- Chancellor
- Vice Chancellor
- Pro Vice Chancellor

For information please

- ICT Manager – to upload on website

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DIT UNIVERSITY
IMAGINE ASPIRE ACHIEVE

Technical Training-Proteus for B.Tech-ECE & EE Students

Course:-B.Tech- ECE & EE 2nd & 3rd Year

Venue:- Computer Lab (Chanakya)

Organized By- Department of ECE

Date:-14th February -25th February 2022

Duration:-30 Hours

Timings:-4:00 PM to 6:00 PM

Introduction to Proteus:

- **Proteus Design Suite** is a software tool set, mainly used for creating schematics, simulating Electronics & Embedded Circuits and designing PCB Layouts.
- Proteus ISIS is used by Engineering students & professionals to create schematics & simulations of different electronic circuits.
- Proteus ARES is used for designing PCB Layouts of electronic circuits.
- It's available in four languages i.e. English, Chinese, Spanish & French.

Why use Proteus:

- Proteus is quite lenient in circuit designing and it works on ideal conditions i.e. if you don't add pull up resistors in Proteus simulation, then it won't give garbage value.
- Proteus is also used for PCB designing, we use **Proteus ARES** for that. (We will discuss it in upcoming lectures)
- Proteus is also used for designing/testing programming codes for different Microcontrollers i.e. Arduino, PIC Microcontroller, 8051 etc.

In Embedded projects, we need to design a programming code for Microcontrollers and for designing such codes you have to perform a lot of testing, which involves uploading code to Microcontroller. So, in such projects, Proteus is a great relief. Let's say, you have to print some strings on 20×4 LCD, then its quite annoying to burn the Microcontroller several times for typographical errors. Instead, design a circuit in Proteus and test your code in the simulation and once you are sure that you are getting perfect output then burn your PIC Microcontroller and test it on real hardware. Quite easy and handy.

Requisite:

The program is designed for students or professionals who are:

- Having a Diploma, BE / B.Tech or equivalent in domains such as Automotive, Mechanical, EEE, ECE, Instrumentation, Mechatronics, and Aeronautics.
- Designing enthusiasts (No academic qualification mandatory)

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- Working in industries such as Automotive, Auto component, Design, Manufacturing, etc.

Training Outcome:

Students benefited from exposure to professional grade tools with an intuitive user interface and a quick **learning** curve. From China and India, through South America and the USA, and across the UK and Europe, the **Proteus** Design Suite is trusted as the tool of choice for embedded engineering and electronics learning.

Syllabus:

First Step with Proteus

- Creating a new project
- User interface & Navigation
- Edit the Tittle Block
- Select and place components
- Components with simulator model
- Set keyboard Shortcuts.
- Manage Components.

Schematic Design

- Schematic Circuit
- Create a Schematic Library
- Creating the Connector
- Creating the Resistors
- Creating the Potentiometer
- Creating the 555 Timer
- Connecting the Schematic
- Adding Tags Terminal Modes
- Finishing the Schematic

PCB Layout

- Switching from Schematic to PCB Layout
- Basic PCB Layout Terminology
- Create a Footprint Library
- Creating the resistors footprints
- Creating the Potentiometer Footprints
- Creating the Diode Led Footprint
- Creating the Connector Footprint
- Creating the 555 Timer Footprint
- Placing the footprints
- Creating the PCB Border
- Design Rule Managers
- Autorouting

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- Manual Routing – Tracks
- Manual Routing- Vias
- Teardrop
- Power plane Generator
- Adding text and Logo
- Placing Holes

3D Visualization

- 3D navigation
- Adding the 3D Components
- Setting the 3D PCB
- Where to find 3D components
- Downloading 3D model

Output Files

- Exporting PDF Schematic
- Exporting PDF Layers
- Custom PDF for Printing
- Generate Gerber Files
- Bill of Materials – BOM
- Proteus Gerber Viewer
- Free Gerber Viewer – Gerbv

- Project based learning LPKF E44 PCB prototyping machine.
- Group Project work.

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Annexure - II

Value added course Details (Academic Year: 2021-22)

VAT Course Name: Proteus Training

VAT Code: VAT 87

Duration in Hours: 30

Number of Students Enrolled: 57

Number of Students Completed: 55

Submitted
HoD/CDC
Career Development Cell
DIT University, Dehradun

Grades:	G= GOOD ; S = Satifactory ; P = Poor ; W = Withdraw			
Student ID	**Student Name**	**Program/Course**	**Year**	**Passing Grade**
190104002	BHAVYA PANDEY	Bachelor of Technology in Electrical Engineering	3rd Year	G
190104003	MONIKA BHANDARI	Bachelor of Technology in Electrical Engineering	3rd Year	S
190104004	HARSHITA CHADDHA	Bachelor of Technology in Electrical Engineering	3rd Year	S
190104005	SHUBHAM SHARMA	Bachelor of Technology in Electrical Engineering	3rd Year	S
190104006	ABHISHEK SAXENA	Bachelor of Technology in Electrical Engineering	3rd Year	G
190104007	AGRIM SAINI	Bachelor of Technology in Electrical Engineering	3rd Year	S
190104008	SHAURYA KUMAR GAURAV	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104001	VISHAL KASHYAP	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104002	MOHAMMAD RUMAN KHAN	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104003	PRANJUL VERMA	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104004	ADITYA PRATAP SINGH	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104005	HARSH CHOUDHARY	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104007	RAJIV YADAV	Bachelor of Technology in Electrical Engineering	3rd Year	G
200104901	DEEPAK DUMKA	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104902	SHASHANK RAJPUT	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104903	UJJWAL	Bachelor of Technology in Electrical Engineering	3rd Year	S
200104904	AARAV RAHTOLE	Bachelor of Technology in Electrical Engineering	3rd Year	G
200104905	DIVYANSH ANAND	Bachelor of Technology in Electrical Engineering	3rd Year	S
210104900	ASHISH RATHOUR	Bachelor of Technology in Electrical Engineering	3rd Year	S
190101030	ABHISHEK NEGI	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103001	ARSH HASAN	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103002	RITIK KUMAR	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103003	RISHABH KUMAR	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103004	PRIYA BAHUGUNA	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103005	KASHISH KUMARI	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103006	ANKIT PUROHIT	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103007	ABHINAV KUMAR	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103008	AYUSH NEGI	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	P
190103009	ABHIJEET SHAH	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	G
190103010	KARTIK G PANWAR	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	G
190103012	DISHA KAKKAR	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103013	ACHINTYA SINGH	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190103014	MAANSI ASTHANA	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
190178024	ABHISHEK KUMAR	Bachelor of Technology in Electronics and Communication Engineering	3rd Year	S
200103001	MOHD WAMIQ KHAN	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103002	GLADSON B. THOMAS	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103003	TUSHAR GUPTA	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103004	RAHUL SINGH	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103005	AMAN KUMAR	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103006	ANKIT MISHRA	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103007	SHRESHTH SHRIVASTAVA	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103008	ANUBHAV SHUKLA	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103009	NIRMAL SINGH MEHTA	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	P
200103010	ANJALI SAKLANI	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103011	SOMYA AGGARWAL	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103012	KHUSHI JAISWAL	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103013	ABHISHEK KUMAR	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103014	SANSKAR SARAN	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S

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200103015	UDAY PRAKASH REDDY	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103016	VARUN THAKUR	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103900	DEV	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
200103901	ISHITA GUSAIN	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
200103902	HARSH PANDEY	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	G
210102902	MAKSHIK ANAND	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
210103900	ADIL KHAN	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
210103901	NEERAJ KUMAR SINGH	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S
210103902	SANYAM PAINULY	Bachelor of Technology in Electronics and Communication Engineering	2nd Year	S

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