

CAREER DEVELOPMENT CENTRE



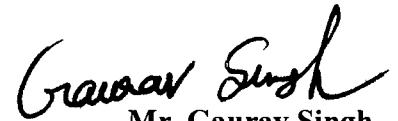
Date: 28th January 2020

Subject: Schedule for Technical Training- VAT 87: 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 8th Feb 2020 – 22nd Feb 2020 for the students of B.Tech 4th & 6th Semester (ECE & EE).

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


Mr. Gaurav Singh
Head - ~~CDC~~ CDC
Career Development Cell
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


Registrar
DIT University, Dehradun

Technical Training-Proteus (VAT 87)

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

Venue:- Computer Lab (Chanakya)

Organized By- Department of ECE

Date:- 8th Feb 2020 – 22nd Feb 2020

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 20x4 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)



Registrar

DIT University, Dehradun

- 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 Title 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

- 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.



Registrar
DIT University, Dehradun

Annexure - II

Value added course Details (Academic Year: 2019-20)

VAT Course Name: Proteus Training

VAT Code: VAT 87

Duration in Hours: 30

Number of Students Enrolled: 124

Number of Students Completed: 122

Grades:

G= GOOD ; S = Satisfactory ; P = Poor ; W = Withd

Submitted

Head - CDC
Career Development Cell
DIT University, Dehradun

Student ID	Student Name	Program/Course	Year	Passing Grade
180104015	ABHINAV SINGH	BTEE	2nd Year	S
190104911	KISHAN JAISWAL	BTEE	2nd Year	S
190103900	SHIVANGI SHARMA	BTECE	2nd Year	G
170103005	ANSHUL	BTECE	3rd Year	S
190104909	TRILOK SINGH GAIRA	BTEE	2nd Year	S
190104903	NIRAJ KUMAR THAKUR	BTEE	2nd Year	S
190104902	PRAKHAR BHIDOLA	BTEE	2nd Year	G
190104905	SHIVAM CHAMOLI	BTEE	2nd Year	G
190104904	ALI UMMAR FARUK	BTEE	2nd Year	S
170103042	DIKSHANT SINGH	BTECE	3rd Year	P
170104026	AKLESH MISHRA	BTEE	3rd Year	S
170103036	TANAY PANDA	BTECE	3rd Year	S
190103901	SAKSHAM PANDEY	BTECE	2nd Year	S
190104910	PRABHAT SAGAR	BTEE	2nd Year	S
180103002	PRERNA SINGH	BTECE	2nd Year	G
190104901	UDITANSHU SINGH	BTEE	2nd Year	S
170104014	KUSHAGRA KUMAR	BTEE	3rd Year	S
170103040	AKASH KAUSHIK	BTECE	3rd Year	S
170103051	MOKSH MANCHANDA	BTECE	3rd Year	G
180104900	SAMSON DEBBARMA	BTEE	3rd Year	S
180104901	DAVID KALAI	BTEE	3rd Year	S
170104011	PRANAV CHAUHAN	BTEE	3rd Year	G
170103022	GAURAV KUMAR	BTECE	3rd Year	S
180104006	SHIVANI RUDI	BTEE	2nd Year	S
190104907	SURYAKANT BAHUGUNA	BTEE	2nd Year	G
180103019	RUDRA PRATAP	BTECE	2nd Year	S
170103017	MANIK SEN	BTECE	2nd Year	S
170103027	ANKIT SEMWAL	BTECE	3rd Year	S
180104013	ROMIT GUPTA	BTEE	2nd Year	S
170103031	HARPREET SINGH	BTECE	3rd Year	S
180103020	RAHUL RAJ	BTECE	2nd Year	S
170103018	VARUN SINGH BISHT	BTECE	3rd Year	G
170103028	MUSKAN BHATIA	BTECE	3rd Year	S
170103010	PRATEEK RANA	BTECE	3rd Year	S
170103023	ASHUTOSH SINGH	BTECE	3rd Year	G
170103039	ANUJ PURI	BTECE	3rd Year	S
170103025	AKASHDEEP CHAKRABORTY	BTECE	3rd Year	S
170103048	SYED SHAVEZ ZAMIR RIZVI	BTECE	3rd Year	S
170103002	KUNAL TYAGI	BTECE	3rd Year	G
170104004	VIVEK KUMAR	BTEE	3rd Year	G

Registrar
DIT University, Dehradun

170103049	KRISHNA KANT	BTECE	3rd Year	S
180104011	GAURAV RANA	BTEE	2nd Year	S
170103006	DAMANPREET SINGH	BTECE	3rd Year	S
170104018	AMRITANSH PATHAK	BTEE	3rd Year	S
170104001	ROHIT PANT	BTEE	3rd Year	S
180104010	RHYTHAM SHARMA	BTEE	2nd Year	S
170103054	SIMRAN ANEJA	BTECE	3rd Year	G
180103022	VANSHIKA SHUBHAM	BTECE	2nd Year	S
170103034	UPAMANYU DWIVEDI	BTECE	3rd Year	S
180104903	AASHISH SINGH YADAV	BTEE	3rd Year	S
170103009	SHUBHAM KUMAR	BTECE	3rd Year	G
170103011	ADITI GOPAL	BTECE	3rd Year	S
170103043	ABHISHEK SONI	BTECE	3rd Year	S
180104014	SHEFALY GUPTA	BTEE	2nd Year	G
170106072	HARSHIT KUMAR	BTECE	3rd Year	S
170103008	GAURANG DWIVEDI	BTECE	3rd Year	S
170103035	ATHULYA SREEKUMAR NAIR	BTECE	3rd Year	G
170103050	SHIVANI RAWAT	BTECE	3rd Year	S
170103053	ADITYA PRATAP	BTECE	3rd Year	S
170104002	ISHAN SHARMA	BTEE	3rd Year	S
170104009	MUSHARRAF ALAM	BTEE	3rd Year	S
170103001	ADITYA VIKRAM SINGH	BTECE	3rd Year	S
170103014	PRANAV KASHYAP	BTECE	3rd Year	S
170104022	HIMANSHU YADAV	BTEE	3rd Year	G
170104005	SURAJ KUMAR	BTEE	3rd Year	S
180103007	ANCHAL BISHT	BTECE	2nd Year	S
190103902	ANSHUMAN DIMRI	BTECE	2nd Year	G
170104003	JATIN NEGI	BTEE	3rd Year	S
170103026	SHIVAM RAJ RAI	BTECE	3rd Year	S
170103004	AKSHAT KUMAR	BTECE	3rd Year	S
170103019	RUSHIL GUPTA	BTECE	3rd Year	G
180103017	ASHUTOSH SINGH	BTECE	2nd Year	G
170104007	SHISHIR BARNIE	BTEE	3rd Year	S
170103021	ADITYA PANT	BTECE	3rd Year	S
180103005	SHYVANSHU MEHRA	BTECE	2nd Year	S
170103003	SHIVANSHU WAILA	BTECE	3rd Year	S
170103045	NEELESH RAINA	BTECE	3rd Year	S
170103015	SUHASINI KARNATAK	BTECE	3rd Year	S
170104024	GOURAV KUMAR	BTEE	3rd Year	G
170103044	RAHUL SHARMA	BTECE	3rd Year	S
170103016	RITVIK RANA	BTECE	3rd Year	S
180104004	AYUSHI CHAMOLI	BTEE	2nd Year	S
170103038	ASHNA RAJ	BTECE	3rd Year	G
170104016	SAURABH KUMAR DUBEY	BTEE	3rd Year	S
170103007	SATENDRA PRATAP SINGH BUNDELA	BTECE	3rd Year	S
170104006	RISHITA THAPA	BTEE	3rd Year	G
170103033	ANUP SINGH	BTECE	3rd Year	S
180103004	YOGENDRA SINGH RAWAT	BTECE	2nd Year	S
180103021	DRISHYA CHAUHAN	BTECE	2nd Year	G
180103003	VISHNU B PILLAI	BTECE	2nd Year	S

180103013	PRANKUL BISHT	BTECE	2nd Year	S
170103032	SHASHANK CHAUHAN	BTECE	3rd Year	S
170103052	ROHIT SINGH DASILA	BTECE	3rd Year	S
190104900	PRATIK KUMAR	BTEE	2nd Year	S
180103014	ASTHA AGARWAL	BTECE	2nd Year	S
180103001	KUSH GAUR	BTECE	2nd Year	G
170104012	SAMARTH KAUSHIK	BTEE	3rd Year	S
180104012	SOMYA MATHUR	BTEE	2nd Year	S
180103011	UDAY KUMAR SINGH	BTECE	2nd Year	G
180104009	MUGUNDHAN NALLATHAMBI	BTEE	2nd Year	S
170103030	MANSI DIMRI	BTECE	3rd Year	S
180103015	AYUSH DUBEY	BTECE	2nd Year	S
170103029	SANKALP KASHYAP	BTECE	3rd Year	G
170103024	ASHISH RAJ	BTECE	3rd Year	G
180103009	ISHIKA JAIN	BTECE	2nd Year	S
160103056	RITIK YADAV	BTECE	3rd Year	S
180104003	MANSI GUPTA	BTEE	2nd Year	S
180103008	ISKAND GAUR	BTECE	2nd Year	S
170103012	PRASHANT SAMANT	BTECE	3rd Year	S
170104021	SATYAM DABRAL	BTEE	3rd Year	S
170104010	DHEERAJ PANGTI	BTEE	3rd Year	G
180104007	RASHI KUMARI	BTEE	2nd Year	S
180103010	MITAKSHA AGGARWAL	BTECE	2nd Year	S
180104016	ABHINAV CHANDEL	BTEE	2nd Year	S
190104906	AYUSH SINGH	BTEE	2nd Year	G
180103006	MAINAK KAR	BTECE	2nd Year	S
180104001	DIVYAM SHARMA	BTEE	2nd Year	S
190104908	DEVARTH SHARMA	BTEE	2nd Year	G
170104017	HIMANSHU GUPTA	BTEE	3rd Year	S
170103013	SURAJ SINGH RAUTELA	BTECE	3rd Year	S
180104005	BIBHAKAR KUMAR SINGH	BTEE	2nd Year	G
180104002	MOHD AMAAN HAIDER	BTEE	2nd Year	S
180103016	KISHAN KUMAR	BTECE	2nd Year	S
180104008	ADITYA PUNDIR	BTEE	2nd Year	S


 Registrar
 DIT University, Dehradun