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**CAREER DEVELOPMENT**  
**CENTRE**



Date: 3rd February 2023.

**Subject: Schedule for Technical Training – KAPPA (VAT-77)**

**Attention: Students of B.Tech 6<sup>th</sup> Semester (Petroleum Engineering)**

The students are hereby informed that the Technical Training – KAPPA will be held from 14<sup>th</sup> February 2023 to 28<sup>th</sup> February 2023 for the students of B.Tech 6<sup>th</sup> Semester (Petroleum Engineering) .

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

  
**Mr. Saurav Badoni**  
Career Services Cen  
DIT University, Dehradun  
**Incharge- CDC**

**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
- ICT Manager – to upload on website

For information please

**Report: VAT-77**

**Technical Training-KAPPA for B.Tech-Petroleum Engineering Students**

**Course:-**B.Tech- PE 3<sup>rd</sup> Year

**Venue:-** Vish. Room No. 105

**Organized By-** Department of Petroleum Engineering

**Date:-**14<sup>th</sup> February -28<sup>th</sup> February 2023

**Duration:-**30 Hours

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

**About the Course**

- KAPPA is a Petroleum E&P software company specializing in dynamic data analysis. The software is used as standard by almost all service companies and consultants. Technically driven by the desire to create the most advanced software in the industry we operate on all continents and are focused on delivering tools to help clients in these days of low commodity prices and reduced human resources.
- The objective of a KAPPA course is to deliver practical training, the knowledge from which can be employed immediately in the commercial world.
- The training provides essential theoretical knowledge and then immediately concentrates on the real-world use of analysis.
- The KAPPA pressure transient analysis has been designed to teach the generic methodology and the practice of pressure transient analysis (PTA) in addition to the mechanics of Saphir software which is learnt almost as a by-product.

**KAPPA Training Features:**

- Modern pressure transient analysis (PTA) from theory to practice.
- Strong practical emphasis on real data with many real-life examples.
- Immediate return on investment with attendees able to perform commercial analysis upon completion of the course.

**Functionality and Training Content:**

**1. Introduction to PTA**

When do we perform PTA?

**2. Basic theory of diffusion PTA**

The basic principles and terminology governing both methods. Introduction to Darcy's law and the equation of state leading to the diffusivity equation, the principle of superposition, infinite-acting radial flow, wellbore storage and skin and pseudo-steady state.

### **3. PTA methodology**

Methodology from the simple straight-line Horner to the current model-on-the-fly Bourdet derivative.

### **4. Saphir practical**

The basic Saphir features including the interpretation path of load, edit, synchronizing, model, classical methods, the derivative and the application to field examples.

### **5. Well models**

Finite/infinite conductivity fractures, limited entry, and horizontal wells.

### **6. Reservoir models**

Homogenous and heterogeneous models' behavior.

### **7. Boundary models**

Single limit, intersecting, parallel faults, and closed system. Includes typical errors encountered when diagnosing a boundary effect with an illustration of superposition effects and the influence of production duration on the analysis.

### **8. Basic numerical PTA**

The principle of the linear (single phase) numerical model, how to build a model including defining the well type, composite zones, faults, and thickness.

### **9. IPR AOF**

The IPR AOF options in Saphir and specific gas testing features.

#### **Training Outcome:**

In this course, students learned to practice of pressure transient analysis. The emphasis is on a visual and conceptual approach to interpretation including only essential mathematics. Full theory, including formulae and derivations are provided, as well as the conceptual explanation of PTA has been provided to each attendee.

Field examples are used to illustrate each concept. By the end of the course the attendees could perform analyses and developing interpretations. In addition, the attendees have the foundations sufficient for developing further experience in transient and production analysis.

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## Value added course Details (Academic Year: 2022-23)

VAT Course Name: KAPPA Training

VAT Code: VAT 77

Duration in Hours: 30

Number of Students Enrolled: 18

Number of Students Completed: 16

**Grades:**

**G= GOOD ; S = Satisfactory ; P = Poor ; W = Withdraw**

Student ID	Student Name	Program/Course	Year	Passing Grade
200107001	VIRAT SINGH DEORA	Bachelor of Technology in Petroleum Engineering	2020-2024	S
200107007	SUYASH MAHESHWARI	Bachelor of Technology in Petroleum Engineering	2020-2024	S
200107003	SHIVANGI SHARMA	Bachelor of Technology in Petroleum Engineering	2020-2024	G
200107004	ARUNARGHA DAS	Bachelor of Technology in Petroleum Engineering	2020-2024	G
200107002	NABINDRA RUWALI	Bachelor of Technology in Petroleum Engineering	2020-2024	S
200107005	ABHAY KUSHWAHA	Bachelor of Technology in Petroleum Engineering	2020-2024	P
200107008	AMRITESH SHAHI	Bachelor of Technology in Petroleum Engineering	2020-2024	G
200107006	PRAVANG JAISWAL	Bachelor of Technology in Petroleum Engineering	2020-2024	S
220107007	HARUNA MOHAMMED IDRIS	Bachelor of Technology in Petroleum Engineering	2020-2024	S
220107008	ABUBAKAR KABIRU AUDU	Bachelor of Technology in Petroleum Engineering	2020-2024	G
220107009	ADAMU BUKAR ABBA	Bachelor of Technology in Petroleum Engineering	2020-2024	G
220107010	MUHAMMAD LAWAN MUSTAPHA	Bachelor of Technology in Petroleum Engineering	2020-2024	S
220107011	SAHURA TASIU	Bachelor of Technology in Petroleum Engineering	2020-2024	S
220107012	ALIYU ABUBAKAR DANFULATA	Bachelor of Technology in Petroleum Engineering	2020-2024	G
220107013	MUHAMMED MUKHTAR BALE	Bachelor of Technology in Petroleum Engineering	2020-2024	S
220107014	MUSA ADAMU YAWALE	Bachelor of Technology in Petroleum Engineering	2020-2024	P
220107015	HARUNA BURAH	Bachelor of Technology in Petroleum Engineering	2020-2024	G
220107016	ADAMU AUDU	Bachelor of Technology in Petroleum Engineering	2020-2024	G

  
 Career Services Cell  
 DIT University, Dehradun