



**PARVATHANENI BRAHMAYYA  
SIDDHARTHA COLLEGE OF ARTS & SCIENCE**

Siddhartha Nagar, VIJAYAWADA - 520 010, Andhra Pradesh  
Autonomous, NAAC A+ Grade, ISO Certified Institution



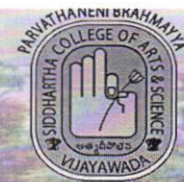
1.3.2 Number of certificate/value added courses/Diploma Programmes offered by the institutions and online courses of MOOCs, SWAYAM/e-PG Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years.

**SUPPORTING DOCUMENT**  
**Response to DVV Observations**



## INDEX

| S.No. | Particulars  | Page Nos. |
|-------|--|-----------|
| I     | Approval letters for starting the value added course   | 3-7       |
| II    | circular, brochure , report, syllabus covered , attendance sheet duly signed by attendees of DVV suggested Value Added Courses | 8-27      |
| III   | Course completion certificates of DVV suggested Value Added Courses  | 28-149    |



PARVATHANENI BRAHMAYYA(P.B.)

**SIDDHARTHA COLLEGE OF ARTS & SCIENCE**

VIJAYAWADA, ANDHRA PRADESH

Autonomous Since 1988

NAAC Accredited at 'A+' (Cycle III)

ISO 9001:2015 Certified



Date: 10/01/2023

**From**

Department of Computer Science,  
P. B. Siddhartha College of Arts and Science  
Vijayawada, A. P -520010.

**To**

The principal,  
P. B. Siddhartha College of Arts & Science,  
Vijayawada – 10.

*JK 10/01/23*

**Sub:** Approval for Value Added Course on **Block Chain Technology** (30 Hours Program) – Reg:

Respected Sir,

I am writing to seek your approval for introducing a **Value-Added Course** on Blockchain Essentials for our students. This program, designed for a duration of 30 hours, aims to equip students with essential digital marketing skills, which are highly relevant in today's competitive job market.

The course will cover key topics such as Introduction to **Blockchain technology**, distributed ledger systems, smart contracts and cryptography, blockchain applications in various domains, hands-on sessions & case studies, career opportunities in blockchain Career Opportunities in Blockchain. It will provide hands-on experience through practical sessions and case studies, enhancing students' employability and entrepreneurial skills.

The program will be conducted by qualified faculty members and industry experts, ensuring a comprehensive learning experience for the students. The proposed schedule and syllabus have been reviewed and are aligned with our academic objectives.

The sessions can be scheduled as per the students' academic convenience, either during weekends or after regular class hours.

I extend my full support to the concerned faculty and coordinators for the successful execution of this course. Kindly proceed with the necessary arrangements for enrollment, resource allocation, and scheduling.

I kindly request you to grant approval for this course so that we can initiate the necessary arrangements. I am confident that this initiative will add significant value to our students' learning journey.

Please feel free to reach out for any further clarifications.

Approval by:  
Koneru Sudhir,  
Deputy HOD


Department of Computers,  
P. B. Siddhartha College of Arts and Science

*[Signature of Koneru Sudhir]*

*Approved  
A. Chaitanya  
Academic Officer*



To  
The Principal  
PB Siddhartha College of Arts & Science  
Vijayawada-10



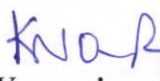
**Subject:** Request for Permission to Introduce a Value-Added Course on Digital Marketing

Respected Sir,

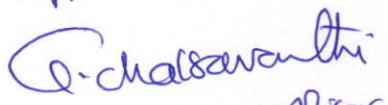
. I am writing to seek your approval for introducing a **Value-Added Course on Digital Marketing** for our students. With the increasing importance of digital presence in today's business world, this course will equip students with essential skills in online marketing, social media management, and content marketing.

We look forward to your support and valuable suggestions. Kindly grant us permission to introduce this program for the benefit of our students.

Thank you for your time and consideration.

  
Yours sincerely,  
Kona Narayana Rao  
Dy-Head, Department of Commerce  
PBS College, Vij-10

Approved

  
Academic Officer.





PARVATHANENI BRAHMAYYA(P.B.)

# SIDDHARTHA COLLEGE OF ARTS & SCIENCE

VIJAYAWADA, ANDHRA PRADESH

Autonomous Since 1988

NAAC Accredited at 'A+' (Cycle III)

ISO 9001:2015 Certified



Date: 16.09.2023

**From**

Department of Computer Science,  
P. B. Siddhartha College of Arts and Science  
Vijayawada, A. P -520010.

**To**

The principal,  
P. B. Siddhartha College of Arts & Science,  
Vijayawada – 10.

*[Handwritten signature and date 16/09/23]*

**Sub:** Approval for Value Added Course on IBM Data Science Tools (30 Hours Program) – Reg:

Respected Sir,

I am writing to seek your approval for introducing a **Value-Added Course** on IBM: Data Science Tools for our students. This program, designed for a duration of 30 hours, aims to equip students with essential digital marketing skills, which are highly relevant in today's competitive job market.

The course will cover key topics such as Introduction to **IBM: Data Science Tools**, Data handling & programming tools, Python for Data Science, Jupyter note book, Anaconda, Data Visualization & Analytics, Data Visualization Tools, Exploratory Data Analysis (EDA), Introduction to Big Data Tools, Machine Learning & Cloud Platforms, Auto ML & No-Code ML Platforms

It will provide hands-on experience through practical sessions and case studies, enhancing students' employability and entrepreneurial skills.

The program will be conducted by qualified faculty members and industry experts, ensuring a comprehensive learning experience for the students. The proposed schedule and syllabus have been reviewed and are aligned with our academic objectives.

The sessions can be scheduled as per the students' academic convenience, either during weekends or after regular class hours.

I extend my full support to the concerned faculty and coordinators for the successful execution of this course. Kindly proceed with the necessary arrangements for enrollment, resource allocation, and scheduling.

I kindly request you to grant approval for this course so that we can initiate the necessary arrangements. I am confident that this initiative will add significant value to our students' learning journey.

Please feel free to reach out for any further clarifications.

*[Handwritten signature]*  
Approval by: \_\_\_\_\_

Koneru Sudhir,  
Deputy HOD  
Department of Computers,  
P. B. Siddhartha College of Arts and Science

*[Handwritten signature]*  
Approved  
S. Chaitanya  
Academic Officer

To  
The Principal,  
{PB Siddhartha College of  
Arts & Science  
VIJAYAWADA - 520010.



Sir,

Sub: Request for Permission to introduce a  
Value Added course on 'Principles of Management'

I am writing this letter to seek your approval for  
introducing a value added course on 'Principles of Management'  
for students of all disciplines other than Business Administration.  
This course imparts basic knowledge on Management, to the  
students which will help them professionally.

Hence I request you sir to kindly grant us permission  
to introduce this course for the benefit of the students.

Thanking you Sir,

Yours Sincerely



(K.V. Ramesh Chandra)  
Dy. HOD - Department of  
Business Administration (UG)

Approved

C. Chakravarthi  
Academic Officer




From

Dr. T.S. Krishna,  
HoD-Department of Physics,  
P.B. Siddhartha College of Arts & Science,  
Vijayawada-10.

Vijayawada-10  
08-05-2021

To.

The Principal,  
P.B. Siddhartha College of Arts & Science,  
Vijayawada-10.



Sub: Approval for Value Added Course on Solar Energy and its application (30 Hours Programme)-Reg.

I am writing to seek your approval for introducing a Value-Added Course on Solar Energy and its applications for our students who are admitted in 2022-23. This programme, designed for a duration of 30 hours, aims to equip students with Technical Skills which are highly relevant in today's need of renewable energy.

The course will cover key topics such as renewable energy, efficiency of solar panels, batteries, recent advances in sciences & Technology particularly Solar energy and thin films. It will provide hands on experience through practical sessions and enhancing students' employability and entrepreneurial skills.

The programme will be conducted by qualified faculty members and industry experts, ensuring a comprehensive learning experience for the students. The proposed schedule and syllabus have been reviewed and are aligned with our academic objectives.

The session can be scheduled as per the students 'academic convenience, either during weekends or after regular class hours.

I extend my full support to the concerned faculty and coordinators for the successful execution of this course. Kindly proceed with necessary arrangements for enrollment, resource allocation, and scheduling.

I kindly request you to grant approval for this course so that we can initiate the necessary arrangements. I am confident that this will add significant value to our students learning journey.

Please feel free to reach out for any further clarifications.

Approval By:

M. P. Sreen

For: Dr. T.S. Krishna,  
HoD- Department of Physics,  
P.B. Siddhartha College of Arts & Science

Approved  
G. Chakravarthy  
Academic Officer



## Solar Energy and Applications

**Course Code: 22PHVAL01**

(Value- Added Course offered by the Department of Physics)

**Year of offering:** 2022-23

**Offered to :** B.Sc. (M.P.C)

**Duration :** 45 hours

**Semester of offering:** Even (IV)

**Prerequisites:** Basic Knowledge of Physics

**Credits:** 2(additional)

### Course Description

This course gives you an introduction to the fundamentals of solar power as it applies to solar panel system installations. This course introduces the technology that converts solar energy to other energy resources such as electricity, heat and solar fuels with a main focus on electricity generation and explain how solar panels, or photovoltaic (PV). You will be able to identify the key components needed in a basic photovoltaic (solar panel) system, such as is found on a house or building, and explain the function of each component in the system. This course explores the advantages, limitations and challenges of different solar cell technologies, such as crystalline silicon solar cell technology, thin film solar cell technologies and the latest novel solar cell concepts as studied on lab-scale. We will discuss the specifications of solar modules and demonstrate how to design a complete solar system for any particular application.

### Course Objectives

1. Introduction to solar energy collectors
2. Introduction to various photovoltaic
3. Knowledge on Photovoltaic
4. Knowledge on conversion of different energies
5. Gain knowledge on applications
6. Able to identify the key components needed in a basic photovoltaic (solar panel) system

**Course Outcomes:** After completion of this course, the students will know about

1. Energy Scenario, overview of solar energy conversion devices and applications, physics of propagation of solar radiation from the sun to earth
2. Sun-Earth Geometry, Extra-Terrestrial and Terrestrial Radiation, Solar energy measuring instruments
3. Fundamentals of solar PV cells
4. Solar thermal power generation (Solar concentrators).

**Mode of Delivery:** Face to Face

**Is your course Theory/Practical/Both? : Both**

**Mode of Assessment and Weightage**

**Multiple Choice Questions : 40 Marks**

**Course Planner**

**Dr T S Krishna**



## **P.B. SIDDHARTHA COLLEGE OF ARTS & SCIENCE**

Siddhartha Nagar, Vijayawada – 520 010

*Autonomous - ISO 9001 - 2015 Certified*

### **TITLE OF THE PAPER: SOLAR ENERGY AND ITS APPLICATIONS**

**Offered to:** B.Sc. (MPC)

**Course Type:** Core (L) 22PHVAL01

**Semester:** IV

**Credits:** 02

**Hours Taught:** 30 hrs. per Semester

**Max.Time:** 2 Hours

### **Course Description**

This course gives you an introduction to the fundamentals of solar power as it applies to solar panel system installations. This course introduces the technology that converts solar energy to other energy resources such as electricity, heat and solar fuels with a main focus on electricity generation and explain how solar panels, or photovoltaic (PV). You will be able to identify the key components needed in a basic photovoltaic (solar panel) system, such as is found on a house or building, and explain the function of each component in the system. This course explores the advantages, limitations and challenges of different solar cell technologies, such as crystalline silicon solar cell technology, thin film solar cell technologies and the latest novel solar cell concepts as studied on lab-scale. We will discuss the specifications of solar modules and demonstrate how to design a complete solar system for any particular application

### **Course Objectives**

1. Introduction to solar energy collectors
2. Introduction to various photovoltaics
3. Knowledge on Photovoltaics
4. Knowledge on conversion of different energies
5. Able to identify the key components needed in a basic photovoltaic (solar panel) system

**Course Outcomes:** After completion of this course, the students will know about

1. Energy Scenario, overview of solar energy conversion devices and applications, physics of propagation of solar radiation from the sun to earth
2. Sun-Earth Geometry, Extra-Terrestrial and Terrestrial Radiation, Solar energy measuring instruments
3. Fundamentals of solar PV cells
4. Solar thermal power generation (Solar concentrators).

### List of experiments

1. Performance testing of solar cooker.
2. study of V-I characteristics of solar cell
3. Study the effect of input light intensity on the performance of solar cell.
4. Measurement of efficiency of solar flat plate collector
5. Study on solar photovoltaic panel in series and parallel combination.
6. Performance of solar module under various conditions (dusting)
7. Measurement of emissivity, reflectivity and transitivity
8. Effect of tilt angle on the efficiency of solar cell

Note :

1. 8 (Eight) experiments are to be done and recorded in the lab. These experiments will be evaluated in CIA.
2. For certification minimum of 7 (Seven) experiments must be done and recorded by student who had put in 75 % of attendance in the lab.
3. **Best 6 experiments are to be considered for CIA.**
4. 10 marks for CIA.
5. 40 marks for practical exam.

### The marks distribution for the Semester End practical examination is as follows:

|   |           |
|---|-----------|
| Formula/ Principle / Statement with explanation of symbols    | 05        |
| Diagram/Circuit Diagram / Tabular Columns                     | 05        |
| Setting up of the experiment and taking readings/Observations | 10        |
| Calculations (explicitly shown) + Graph + Result with Units   | 05        |
| Procedure and precautions                                     | 05        |
| Viva-voce   | 05        |
| Record  | 05        |
| <b>Total Marks:</b>   | <b>40</b> |



Class : II MPC

Course Code :

22PHVAL01

| Roll No | Name of the Student   | Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---------|-----------------------|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 201p    | D. Durga prasad       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 202p    | K. pavan kumar        |      | A | 1 | 2 | A | A | 3 | 4 | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 |
| 203p    | B. Gowri              |      | A | A | A | A | A | 1 | 2 | 3 | 4 | 5  | 6  | 7  | 8  | 9  | 10 |
| 204p    | S. Madhu Rama Durga   |      | A | A | A | A | 1 | 2 | 3 | 4 | 5 | 6  | 7  | 8  | 9  | 10 | 11 |
| 205p    | G. Sravani            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | A  | 11 | 12 | 13 | 14 |
| 206p    | Sk. Shafiullah        |      | 1 | 2 | 3 | A | 4 | 5 | 6 | 7 | 8 | 9  | 10 | A  | A  | 11 | 12 |
| 207p    | T. Srinivasa Rao      |      | A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 |
| 208p    | C. Swamy yoganand     |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 209p    | B. Chaitanya Naik     |      | A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9  | 10 | A  | 11 | 12 | 13 |
| 210p    | N. Mani Sravani       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 211p    | P. Vijay Kumar        |      | 1 | 2 | 3 | A | A | 4 | 5 | 6 | 7 | 8  | 9  | 10 | 11 | 12 | 13 |
| 212p    | L. Sai Sekhar         |      | 1 | 2 | 3 | A | 4 | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 |
| 213p    | M. Siva Hanikanta     |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 214p    | T. Hema Sai           |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | A  |
| 215p    | M. Amarnadh           |      | 1 | A | A | A | 2 | 3 | 4 | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 |
| 216p    | R. Chaturvedi         |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 217p    | B. Pavani             |      | A | A | 1 | A | 2 | 3 | 4 | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 |
| 218p    | D. Bhavya Chaitanya   |      | 1 | 2 | 3 | 4 | 5 | A | A | A | 6 | 7  | 8  | 9  | 10 | 11 | 12 |
| 219p    | B. Baby Renuka        |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 220p    | Y. Bala satyanarayana |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A  | 10 | 11 | 12 | 13 | 14 |
| 221p    | Sk. Fazal             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 222p    | P. Maheswari          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 223p    | B. Hemant Noyak       |      | A | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9  | 10 | 11 | 12 | 13 | 14 |
| 224p    | B. Srinivas           |      | A | A | 1 | 2 | 3 | 4 | 5 | 6 | A | A  | 7  | 8  | 9  | 10 | 11 |
| 225p    | B. Sri Dharani        |      | 1 | 2 | 3 | 4 | 5 | 6 | A | 7 | 8 | 9  | A  | 10 | 11 | 12 | 13 |
| 226p    | B. Bhavani Krishna    |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | A  | A  | 12 | 13 |
| 227p    | A. Durga              |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | A  | A  | 13 |
| 228p    | S. Brahma Reddy       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | A  | A  | 12 | 13 |

Title of the Paper : Solar Energy & its Applications. Lab

[illegible]



Class : II MPC

Course Code :

22PHVAL01

| Roll No | Name of the Student    | Date | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
|---------|------------------------|------|---|---|----|----|---|---|----|----|----|----|----|----|----|----|----|
| 211     | G. Karthik             |      | 8 | 9 | 10 | 11 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 235p    | T. Viswanath Raju      |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 236p    | B. prabhu chaitanya    |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 237p    | Y. Jhansi Rani         |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 238p    | A. Surya prakash Reddy |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 239p    | B. Uttej               |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 240p    | N. Midhilesh           |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 241p    | Sk. Khaja              |      | A | 1 | 2  | 3  | 4 | 5 | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 242p    | V. Chiru Venkat        |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |
| 243p    | M. praveen Kumar       |      | A | A | A  | A  | 1 | 2 | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 | 11 |
| 244p    | V. Rakesh Babu         |      | A | 1 | A  | 2  | 3 | 4 | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |
| 245p    | K. Durga prasad        |      | A | A | 1  | 2  | 3 | 4 | 5  | 6  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |
| 246p    | Sk. Ameer Hamza        |      | 1 | 2 | 3  | 4  | 5 | 6 | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |

Title of the Paper : Solar Energy & its applications lab

[illegible]

## CIRCULAR

**Department of Computer Science**  
**P. B. Siddhartha college of Arts and Science**

**Subject: Announcement of Data Science tools Certificate Course**

The Department of Computer Science is pleased to announce a **Certificate Course in Data Science**, designed to equip students with essential skills in data analysis, machine learning, and visualization. This course will be beneficial for students aspiring to build a career in data science and analytics.

**Course Details:**

- **Course Name:** Data Science Certificate Course
- **Duration:** 30 Hours
- **Offered By:** Department of Computer Science
- **Eligibility:** Open to all interested students
- **Mode of Instruction:** [Offline]
- **Course Content:** Introduction to Data Science, Python for Data Analysis, Machine Learning Basics, Data Visualization, and Case Studies.
- **Certificate:** Upon successful completion of the course, participants will be awarded a certificate by the Department of Computer Science.

**Registration Details:**

Interested students are requested to register by through Department Office. Limited seats are available, and selection will be on a first-come, first-served basis.

We encourage all interested students to take advantage of this opportunity to enhance their skills in data science.

Head of the Department  
Department of Computer Science  
P. B. Siddhartha college of Arts and Science

16.09.2023





# DATA SCIENCE TOOLS

- Introduction to Data Science and Analytics
- Python and R for Data Science
- Data Visualization Techniques
- Machine Learning Basics
- Industry Applications and Case Studies



## Data Science Tools Certificate Course

(Certificate Course offered by the Department of Computer science)

Year of offering : 2022-23

Offered to : Any computer branch

Duration : 30 hours

Duration : 30 hours

Prerequisites : Computer networks & network security

### Course Description

This course provides an introduction to essential tools used in data science, focusing on practical applications and hands-on experience. It covers data manipulation, visualization, statistical analysis, and machine learning tools.

### Course Objectives

- To introduce key data science tools and environments.
- To develop skills in data handling, cleaning, and visualization.
- To apply machine learning tools for predictive modeling.
- To familiarize students with cloud-based and collaborative data science platforms.

**Course Outcomes:** After completion of this course, the students will able to

1. Utilize Essential Data Science Tools
2. Perform Data Handling and Preprocessing
3. Visualize and Analyze Data
4. Implement Machine Learning Techniques
5. Work with Big Data and Cloud Platforms

### Syllabus

#### Unit 1: Data Handling & Programming Tools (10 Hours)

- Introduction to Data Science Tools
- Python for Data Science
  - Jupyter Notebook, Anaconda
  - NumPy, Pandas for data manipulation
- R for Data Science
  - RStudio, Tidyverse
  - Data Wrangling with dplyr & ggplot2
- SQL for Data Science
  - Basics of SQL, Queries, Joins, and Aggregations
- Data Cleaning & Preprocessing Techniques

#### Unit 2: Data Visualization & Analytics (10 Hours)

- **Data Visualization Tools**
  - Matplotlib, Seaborn (Python)
  - ggplot2, Plotly (R)
  - Tableau and Power BI Basics
- **Exploratory Data Analysis (EDA)**
  - Descriptive Statistics
  - Handling Missing Data, Outliers, and Feature Engineering
- **Introduction to Big Data Tools**
  - Apache Hadoop & Spark Basics

- Google Colab for cloud-based data science

### **Unit 3: Machine Learning & Cloud Platforms (10 Hours)**

- **Machine Learning Tools**
  - Scikit-learn (Python)
  - TensorFlow & Keras Basics
- **AutoML & No-Code ML Platforms**
  - Google AutoML, Azure ML, IBM Watson
- **Version Control & Collaboration**
  - Git, GitHub for Data Science
  - Kaggle & Google Colab for collaborative data science projects
- **Cloud Platforms for Data Science**
  - Google Cloud AI, AWS Machine Learning Services

**Mode of Delivery: Face to Face**



**Course Code :**

| Roll No | Name of the Student         | Date                                |
|---------|-----------------------------|-------------------------------------|
| 2161016 | N. Ramya                    | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 2161029 | A. Karthik                  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 2161039 | S. Murali Krishna           | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 104911  | Venkateswarlu               | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 105911  | Harith                      | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 10691   | G. Sivaganes                | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 10791   | Bindu suathi                | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 10891   | Prem Kumar                  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 10991   | K. Vaishnavi                | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11091   | Veera Bala Bharath          | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11191   | Harigunabhat kamireddy      | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11291   | Y. Sahithi Bhavani          | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11391   | N. Pujitha                  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11491   | B. Bhavya soti              | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11591   | T. Mahima choudary          | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11691   | S. Tejaswi                  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11791   | P. Manohar                  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11891   | Prathap sigh mahesh         | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 11991   | M. Harini                   | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12091   | P. Prabhath Kumar           | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12191   | yu <del>g</del> esh chandra | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12291   | T. Naga Venkata Avanish     | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12391   | C. Vijaya Lakshmi           | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12491   | J. Dilip Kumar Naga         | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12591   | M. Bindu madhavi            | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12691   | T. susmitha                 | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12791   | N. Asmitha sai              | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12891   | B. Anu Sri vidya            | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |
| 12991   | P. sandhya                  | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 |

Title of the Paper :

|       |       |       |       |       |       |       |       |       |       |       |       |       |      |      |      |      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28    | 29   | 30   | 31   | 32   | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |    |    |    |
| 19/10 | 20/10 | 21/10 | 22/10 | 23/10 | 24/10 | 25/10 | 26/10 | 27/10 | 28/10 | 29/10 | 30/10 | 31/10 | 1/11 | 2/11 | 3/11 | 4/11 |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27    | 28   | 29   | 30   | 31   | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 |    |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26    | 27   | 28   | 29   | 30   | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 |    |
| 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25   | 26   | 27   | 28   | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25    | 26   | 27   | 28   | 29   | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |    |
| 14    | 15    | 16    | 17    | 18    | 19    | 20    | 21    | 22    | 23    | 24    | 25</  |       |      |      |      |      |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

## CIRCULAR

**Department of Computer Science,  
P. B. Siddhartha college of Arts and Science.**

**Subject: Certificate Course on Blockchain Essentials**

The Department of Computer Science is pleased to announce a **Certificate Course on Blockchain Essentials**. This program is designed to provide fundamental knowledge and hands-on experience with blockchain technology, its applications, and its impact on various industries.

### **Course Details:**

- **Course Title:** Blockchain Essentials
- **Duration:** 30 Hours
- **Eligibility:** Open to all interested students and professionals
- **Mode of Delivery:** Offline
- **Course Fee:** 300
- **Start Date:** 20.01.2023
- **End Date:** 04.03.2023

### **Course Highlights:**

- ✓ Introduction to Blockchain Technology
- ✓ Distributed Ledger Systems
- ✓ Smart Contracts and Cryptography
- ✓ Blockchain Applications in Various Domains
- ✓ Hands-on Sessions & Case Studies
- ✓ Career Opportunities in Blockchain

**Certification:** Participants who successfully complete the course will receive a **Certificate of Completion** from the Department of Computer Science.

Interested candidates are requested to register by offline through registration.

For further details, please contact **Prem Sai Lakshman**.

Contact number: 7799306115.

We encourage all students and professionals to take advantage of this opportunity to upskill in one of the most in-demand technologies today!

**Head of the Department**  
Department of Computer Science  
P. B. Siddhartha college of Arts and Science.



Department of Computer science  
Certificate course on

# BLOCK CHAIN ESSENTIALS

P. B. Siddhartha College of Arts and Science



## Block chain Essentials

(Certificate Course offered by the Department of Computer science)

**Year of offering:** 2022-23

**Offered to :** Any computer branch

**Duration :** 30 hours

**Prerequisites :** Computer networks & network security

### Course Description

The **Blockchain Essentials** course provides a **comprehensive introduction** to blockchain technology, covering its **fundamental principles, architecture, and real-world applications**. This course explores the decentralized nature of blockchain, cryptographic security, consensus mechanisms, and smart contracts, helping students understand how blockchain is transforming various industries.

### Course Objectives

1. Introduce Blockchain Fundamentals
  2. Explore Blockchain Architecture and Consensus Mechanisms
  3. Understand Blockchain Platforms and Smart Contracts
  4. Examine Real-World Blockchain Applications
- Identify Blockchain Challenges and Future Trends

**Course Outcomes:** Upon successful completion of this course, students will be able to:

Understand the Fundamentals of Blockchain Technology  
Analyze Blockchain Architecture and Consensus Mechanisms  
Explore Different Blockchain Platforms and Smart Contracts  
Evaluate Real-World Applications of Blockchain  
Assess Challenges and Future Trends in Blockchain  
Apply Blockchain Concepts to Real-World Problems

### Syllabus

#### Unit 1: Introduction to Blockchain (10 Hours)

- **Introduction to Blockchain Technology**
  - Definition and characteristics
  - History and evolution of blockchain
  - Blockchain vs. Traditional Databases
  - Use cases and real-world applications
- **Fundamentals of Cryptography and Security**
  - Basics of Cryptography: Hashing, Symmetric & Asymmetric Encryption
  - Digital Signatures and Public Key Infrastructure (PKI)



- Merkle Trees and Data Integrity
- **Distributed Ledger Technology (DLT)**
  - Concept of decentralization
  - Consensus mechanisms: Proof of Work (PoW), Proof of Stake (PoS)
  - Smart Contracts and their significance

## **Unit 2: Blockchain Architecture and Platforms (10 Hours)**

- **Blockchain Structure & Types**
  - Components: Blocks, Nodes, and Network
  - Public, Private, Consortium, and Hybrid Blockchains
  - Blockchain Layers (Network, Consensus, Data, Application)
- **Overview of Blockchain Platforms**
  - Bitcoin Blockchain: Transactions, Mining, and Security
  - Ethereum: Smart Contracts, Gas Fees, and Decentralized Applications (DApps)
  - Hyperledger Fabric: Enterprise Blockchain Solutions
- **Consensus Algorithms & Governance**
  - Byzantine Fault Tolerance (BFT)
  - Delegated Proof of Stake (DPoS) and Proof of Authority (PoA)
  - Blockchain Governance Models

## **Unit 3: Applications, Challenges & Future Trends (10 Hours)**

- **Blockchain in Industry**
  - Financial Services (Cryptocurrencies, DeFi)
  - Supply Chain & Logistics
  - Healthcare & Identity Management
  - Government & Smart Cities
- **Challenges & Limitations**
  - Scalability, Security, and Privacy Issues
  - Energy Consumption and Sustainability Concerns
  - Legal & Regulatory Frameworks
- **Future of Blockchain**
  - Web3, Metaverse, and Blockchain Integration
  - Central Bank Digital Currencies (CBDCs)
  - Emerging Trends: Layer 2 Solutions, Interoperability, and AI in Blockchain

**Mode of Delivery: Face to Face**

Course Code :

| Roll No | Name of the Student    | Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---------|------------------------|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 2140A   | A. Purna sai lakshman  |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 2140A   | Y. satish Kumar        |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 2140A   | Ramesh Keerthana       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 2140A   | B. Tejaswi             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 2140A   | M. Varshini            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 209     | P. Karthik             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 209     | E. Meghana             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 209     | S. Jyaya Prakash       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 209     | M. Kishor Naradan      |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 210     | D. Naga Hema           |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 210     | B. Preetham            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 210     | Sri saihanush yadav    |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213     | H. Tyothsna            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 214     | D. Kamalakani          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 215     | G. Sanhitha            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 216     | V. Divya Varasa        |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 217     | S. sushma Rajyalakshmi |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 218     | M. Meelima             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 219     | Sk. Aftan              |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 220     | P. Sai Sakthi          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 221     | P. Sai Lakshmi         |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 222     | M. Hemalatha           |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 223     | K. Sahitha             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 224     | G. Madhu varshini      |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 225     | A. Ganana prasanna     |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 226     | N. Thyerishma          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 227     | A. Sri charmi          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 228     | K. Sai Ganapati        |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 229     | S. Venkata Pavan Kumar |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

Title of the Paper :

[illegible]

## CIRCULAR

Department of Commerce  
P. B. Siddhartha College of Arts and Science

**Subject:** Announcement of **Digital Marketing Certificate Course**

The Department of Commerce is pleased to announce a **Certificate Course in Digital Marketing**, designed to equip students with essential skills in the field of marketing. This course will be beneficial for students aspiring to build a career in Digital Marketing.

### Course Details:

- **Course Name:** Digital Marketing Certificate Course
- **Duration:** 30 Hours
- **Offered By:** Department of Commerce
- **Eligibility:** Open to all interested students
- **Mode of Instruction:** [Offline]
- **Course Content:** Introduction to Data Science, Python for Data Analysis, Machine Learning Basics, Data Visualization, and Case Studies.
- **Certificate:** Upon successful completion of the course, participants will be awarded a certificate by the Department of Commerce.

### Registration Details:

Interested students are requested to register through the Department Office. Limited seats are available, and selection will be on a first-come, first-served basis.

We encourage all interested students to take advantage of this opportunity to enhance their skills in Digital Marketing.

Head  
Department of Commerce  
P. B. Siddhartha College of Arts and Science.  
11.05.2021.



## Digital Marketing

**Course Code: VACCOMT0**

**(Value- Added Course offered by the Department of Commerce)**

|                      |   |               |
|----------------------|---|---------------|
| Year of offering     | : | 2021- 22      |
| Offered to           | : | B.Com         |
| Duration             | : | 30 Hours      |
| Semester of offering | : | EVEN (II)     |
| Prerequisites        | : |               |
| Credits              | : | 2(Additional) |

### Course Description

This course provides an in-depth understanding of digital marketing, covering its significance, key differences from traditional marketing, and market analysis. Students will learn to plan and create websites, incorporating design, content, and plugins effectively. The course also explores Search Engine Optimization (SEO), including its history, importance, and techniques for on-page and off-page optimization. Additionally, it delves into search engine marketing, focusing on Google Ads, campaign creation, and ad management. By the end of the course, students will gain practical skills to navigate and leverage digital marketing strategies successfully.

### Course Objectives

- **Understand Digital Marketing Fundamentals** – Explain the meaning, importance, and trends in digital marketing while differentiating it from traditional marketing.
- **Analyze Online Market Environments** – Conduct micro and macro environment analyses to assess competition and market trends in the digital space.
- **Develop and Manage Websites** – Learn the process of website planning, creation, and optimization, including content integration and plugin activation.
- **Master Search Engine Optimization (SEO)** – Implement on-page and off-page SEO techniques to enhance website visibility and improve search engine rankings.
- **Create and Manage Digital Advertising Campaigns** – Develop search engine marketing strategies, including Google Ads campaigns, ad creation, and optimization for better reach and engagement.

**Course Outcomes:** After completion of this course, the students will be able to

- **Understand Digital Marketing Concepts** – Students will be able to explain the fundamentals of digital marketing, its significance, and its impact compared to traditional marketing.
- **Analyze and Apply Market Research** – Learners will conduct online market analysis, identifying key micro and macro environmental factors influencing digital strategies.
- **Develop and Optimize Websites** – Students will gain hands-on experience in website creation, incorporating design elements, content, and plugins for functionality.
- **Implement SEO and Digital Advertising Strategies** – Learners will apply SEO techniques and create effective search engine marketing campaigns, including Google Ads, to enhance online visibility and engagement.



## **Syllabus**

### **Unit 1: Introduction**

Digital marketing: Meaning – importance – traditional online marketing vs digital marketing – online marketplace analysis Micro Environment – Online Macro Environment - trends in digital marketing – competitive analysis.

### **Unit 2: Web site planning and creation**

Web Site: meaning – objectives – components of website - website creation – incorporation of design and– adding content, installing and activating plugins.

### **Unit 3: Search Engine Optimization (SEO)**

SEO: Meaning – History and growth of SEO –Importance of Search Engine - On page Optimization – Off Page optimization – Role of Search Engine Operation- google Ad words – Search Engine Marketing: Campaign Creation – Ad Creation, Approval and Extensions.

**Mode of Delivery: Face to Face**

**Is your course Theory/Practical/Both? : Both**

**Mode of Assessment and Weightage**

**LAB Record : 0 Marks**

**SEE LAB : 50 Marks**

**Course Planner : B. PHANI KRISHNA.**



Class: I B Com (Hons) Course Code: AXF

| Roll No | Name of the Student     | Date | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---------|-------------------------|------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 213101P | G. Kavya Sri            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213102P | Sk. Yasmin Pashi        |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213107P | Sk. Nagori Bagha        |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213111P | M. Kaathik              |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213113P | S.V.J. Kumar            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213114P | D. Sogi Sri             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213135P | Ch. Vishwanath          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213146P | B. Shanmukha            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213188P | M. Tahnani              |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213199P | D. Amareeswar Chaudhary |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213264P | Sunny Bansal            |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213265P | K. Asha Jyothi          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213266P | G. Saranya              |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213269P | P. Chandana             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213288P | MD. Amin                |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213299P | D. Lakshmi Pashini      |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213308P | Koushik Patel           |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213320P | Keerthy Pandey          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213328P | P. Naga Lakshmi         |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213338P | Ch. Vijaya Sai          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213348P | Sk. Shakil              |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213358P | Ch. Navneet             |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213360P | A. Prasad               |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213388P | B. V. Kaathik Datta     |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213398P | Sk. Ameesha Begum       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213399P | Gurngurn Balra          |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 213408P | P.D. Harish Kumar       |      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

10+40

Title of the Paper : Digital Marketing

|     | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28           | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41   | 42 | 43 | 44 | 45 |    |    |    |
|-----|----|----|----|----|----|----|----|----|----|----|----|----|--------------|----|----|----|----|----|----|----|----|----|----|----|----|------|----|----|----|----|----|----|----|
|     | 3  | 6  | 7  | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25           | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38   | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 9F  | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | G. Kavya Sri |    |    |    |    |    |    |    |    |    | 6  | 30 | 36 | 104P |    |    |    |    |    |    |    |
| 9F  | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 7  | 31 | 38 | 106P |    |    |    |    |    |    |    |
| 7F  | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 6  | 31 | 38 | 107P |    |    |    |    |    |    |    |
| 11F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           | 28 |    |    |    |    |    |    |    |    | 8  | 33 | 41 | 101P |    |    |    |    |    |    |    |
| 13F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |              |    |    |    |    |    |    |    |    |    | 7  | 32 | 39 | 113P |    |    |    |    |    |    |    |
| 14F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 8  | 31 | 39 | 114P |    |    |    |    |    |    |    |
| 15F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           |    |    |    |    |    |    |    |    |    | 9  | 35 | 44 | 115P |    |    |    |    |    |    |    |
| 16F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 6  | 30 | 36 | 116P |    |    |    |    |    |    |    |
| 18F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 9  | 35 | 44 | 118P |    |    |    |    |    |    |    |
| 19F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           |    |    |    |    |    |    |    |    |    | 7  | 31 | 38 | 119P |    |    |    |    |    |    |    |
| 64F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           | 28 |    |    |    |    |    |    |    |    | 9  | 35 | 44 | 124P |    |    |    |    |    |    |    |
| 65F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           |    |    |    |    |    |    |    |    |    | 8  | 32 | 40 | 125P |    |    |    |    |    |    |    |
| 66F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 | 28 |    |    |    |    |    |    |    | 6  | 29 | 35 | 126P |    |    |    |    |    |    |    |
| 67F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           |    |    |    |    |    |    |    |    |    | 7  | 31 | 38 | 127P |    |    |    |    |    |    |    |
| 68F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 9  | 36 | 45 | 128P |    |    |    |    |    |    |    |
| 69F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           | 28 |    |    |    |    |    |    |    |    | 8  | 34 | 42 | 129P |    |    |    |    |    |    |    |
| 70F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 7  | 32 | 39 | 130P |    |    |    |    |    |    |    |
| 71F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           |    |    |    |    |    |    |    |    |    | 6  | 30 | 36 | 131P |    |    |    |    |    |    |    |
| 72F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 9  | 34 | 43 | 132P |    |    |    |    |    |    |    |
| 73F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           | 28 |    |    |    |    |    |    |    |    | 6  | 30 | 36 | 133P |    |    |    |    |    |    |    |
| 74F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           |    |    |    |    |    |    |    |    |    | 8  | 32 | 40 | 134P |    |    |    |    |    |    |    |
| 75F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           |    |    |    |    |    |    |    |    |    | 7  | 30 | 37 | 135P |    |    |    |    |    |    |    |
| 76F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 7  | 31 | 38 | 136P |    |    |    |    |    |    |    |
| 76F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           | 28 |    |    |    |    |    |    |    |    | 9  | 35 | 44 | 137P |    |    |    |    |    |    |    |
| 79F | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27           |    |    |    |    |    |    |    |    |    | 9  | 36 | 45 | 139P |    |    |    |    |    |    |    |
| 84F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 | 28 |    |    |    |    |    |    |    | 6  | 28 | 34 | 140P |    |    |    |    |    |    |    |
| 85F | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26           | 27 |    |    |    |    |    |    |    |    | 7  | 30 | 37 | 141P |    |    |    |    |    |    |    |



## CIRCULAR

**Department of Business Administration,  
P. B. Siddhartha college of Arts and Science.**

**Subject: Certificate Course on Principles of Management**

The Department of Business Administration (UG) is pleased to announce a **Certificate Course on Principles of Management**. This program is designed to provides foundational knowledge of key management concepts, leadership skills, and strategic decision-making. It equips learners with practical insights to effectively manage teams and business operations.

### **Course Details:**

- **Course Title:** Principles of Management
- **Duration:** 30 Hours
- **Eligibility:** Open to all interested students and professionals
- **Mode of Delivery:** Offline
- **Course Fee:** 300
- **Start Date:** 05.12.2018
- **End Date:** 19.03.2018

### **Course Highlights:**

- ❖ Learn the core functions of management: planning, organizing, leading, and controlling.
- ❖ Gain insights into leadership styles, motivation theories, and effective team management.
- ❖ Understand organizational structures and how to design them for optimal performance.
- ❖ Develop decision-making skills and problem-solving techniques for business challenges.
- ❖ Explore strategies for managing change, innovation, and fostering a sustainable work environment.
- ❖ Focus on ethical practices and corporate social responsibility in modern management.

**Certification:** Participants who successfully complete the course will receive a **Certificate of Completion** from the Department of Business Administration.

Interested candidates are requested to register by offline through registration.

For further details, please contact A. Upendra

Contact number: 9182659670.

We encourage all students and professionals to take advantage of this opportunity to upskill in one of the most in-demand technologies today!

### **Head of the Department**

Department of Business Administration (UG)  
P. B. Siddhartha college of Arts and Science.



# Department of Business Administration

certificate course on

## **PRINCIPLES OF MANAGEMENT**



**P.B SIDDHARTHA COLLEGE OF ARTS AND SCIENCE**



## PRINCIPLES OF MANAGEMENT

(Certificate Course offered by the Department of Business Administration)

**Year of offering** : 2018-19

**Offered to** : BA -EMS

**Duration** : 30 hours

**Prerequisites** : -

### Course Description

This course provides an introduction to the essential principles and practices of effective management. Students will explore the key functions of management, including planning, organizing, leading, and controlling. The course aims to develop a comprehensive understanding of the role of managers in both the private and public sectors, focusing on how they can optimize organizational performance and achieve strategic goals.

### Course Objectives

1. Understand Management Concepts.
2. Master Planning Techniques.
3. Organizational Design and Decision Making.
4. Enhance Directing and Motivation Skills.
5. Implement Control Mechanisms.

**Course Outcomes:** At the end of the course, the student will be able to –

**CO1:** Outline the fundamental Functions of Managers

**CO2:** Explain the basic concepts of planning function

**CO3:** Understand the aspects involved in organizing function

**CO4:** Comprehend the issues in the Directing function

**CO5:** Understand various control techniques practiced at organizations

## **SYLLABUS**

### **Unit – I:**

Definition of Management, Functions of Management, Principles of Management, Levels of Management, Business Strategy-SWOT Analysis.

### **Unit – II:**

Purpose of Planning, Planning Process, Types of Plans, Objectives, Managing by Objectives (MBO); Organizing; Organization Structure, Formal and Informal Organization, Decision Making Process.

### **Unit – III:**

Directing, Motivation, Motivation Theories, Leadership Styles, Leadership Theories, Controlling, Process of Controlling, Types of Control-Budgetary and Non-Budgetary, Control Techniques, Cost Control, Purchase Control, Maintenance Control, QualityControl.

### **Text Book:**

1. Sharma, Principles of Management, Kalyani Publishers, Hyderabad.

### **References:**

1. Koontz, H. and Weihrich H, Management, McGraw Hill.
2. Stoner, J etc., Management, Pearson Education.
3. Charles.W.L. Hill& Steven.L. McShane, Principles of Management, McGraw Hill Education India Pvt. Ltd., Secunderabad.

**Mode of Delivery: Face to Face**

Class : I B A E M S Course Code : \*

| Roll No | Name of the Student           | Date    | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---------|-------------------------------|---------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 180101  | Daxavath Omkar                | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180102  | Gurram Raja Narasimhasao      | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180103  | Jillella veerendra            | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180104  | Thota leela ojay gogor        | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180105  | Kandula Sree keethi           | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180107  | Chandana Prasanthi            | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180108  | Addepalli Srinaga Satyananjit | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180109  | Kandula Sree hoba             | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180110  | Simhadri Ganesham             | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180111  | Ganapada mutha keshava        | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180113  | Gandham Venkatesh             | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180114  | Potreddy Srinivasa Reddy      | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180115  | Murumadiseti Babubrahmanjan   | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180117  | Shaik Mahabadi hacha          | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180118  | Tumma saveni saddy            | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180120  | Gurram Alaven babu            | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180121  | Bandurath Venkata Siva Aloik  | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180122  | Damparaboina Muthala xad      | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180123  | Maddadi pavan                 | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180126  | Tanduru Akhil                 | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180128  | Dammisetty pavan kol gpr      | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180130  | Pabba Akhil                   | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180131  | Adalogiri Praveen kurraas     | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180132  | Guthikonda laksh              | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180133  | Murthy Durga prasod           | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180134  | Kishini Narasimha kanna Reddy | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180135  | Kunchala Arjun Bhosadwaj      | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180137  | Addanki v prandha             | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180138  | Koramarthy Sai sreeja         | 5/12/20 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

Title of the Paper : Principles of Management

| 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28      | 29      | 30      | 31      | 32      | 33      | 34      | 35      | 36      | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |
|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 20/11/20 | 21/11/20 | 22/11/20 | 23/11/20 | 24/11/20 | 25/11/20 | 26/11/20 | 27/11/20 | 28/11/20 | 29/11/20 | 30/11/20 | 31/11/20 | 1/12/20 | 2/12/20 | 3/12/20 | 4/12/20 | 5/12/20 | 6/12/20 | 7/12/20 | 8/12/20 | 9/12/20 | 10/12/20 | 11/12/20 | 12/12/20 | 13/12/20 | 14/12/20 | 15/12/20 | 16/12/20 | 17/12/20 | 18/12/20 |
| 1        | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21      | 22      | 23      | 24      | 25      | 26      | 27      | 28      | 29      | 30       | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38       |
| 2        | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22      | 23      | 24      | 25      | 26      | 27      | 28      | 29      | 30      | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39       |
| 3        | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23      | 24      | 25      | 26      | 27      | 28      | 29      | 30      | 31      | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40       |
| 4        | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24      | 25      | 26      | 27      | 28      | 29      | 30      | 31      | 32      | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41       |
| 5        | 14       | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25      | 26      | 27      | 28      | 29      | 30      | 31      | 32      | 33      | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42       |
| 6        | 15       | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26      | 27      | 28      | 29      | 30      | 31      | 32      | 33      | 34      | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43       |
| 7        | 16       | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27      | 28      | 29      | 30      | 31      | 32      | 33      | 34      | 35      | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       |
| 8        | 17       | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28      | 29      | 30      | 31      | 32      | 33      | 34      | 35      | 36      | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |
| 9        | 18       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       | 29      | 30      | 31      | 32      | 33      | 34      | 35      | 36      | 37      | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |          |
| 10       | 19       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30      | 31      | 32      | 33      | 34      | 35      | 36      | 37      | 38      | 39       | 40       | 41       | 42       | 43       | 44       | 45       |          |          |
| 11       | 20       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31      | 32      | 33      | 34      | 35      | 36      | 37      | 38      | 39      | 40       | 41       | 42       | 43       | 44       | 45       |          |          |          |
| 12       | 21       | 22       | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32      | 33      | 34      | 35      | 36      | 37      | 38      | 39      | 40      | 41       | 42       | 43       | 44       | 45       |          |          |          |          |
| 13       | 22       | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33      | 34      | 35      | 36      | 37      | 38      | 39      | 40      | 41      | 42       | 43       | 44       | 45       |          |          |          |          |          |
| 14       | 23       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33       | 34      | 35      | 36      | 37      | 38      | 39      | 40      | 41      | 42      | 43       | 44       | 45       |          |          |          |          |          |          |
| 15       | 24       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33       | 34       | 35      | 36      | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44       | 45       |          |          |          |          |          |          |          |
| 16       | 25       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33       | 34       | 35       | 36      | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      | 45       |          |          |          |          |          |          |          |          |
| 17       | 26       | 27       | 28       | 29       | 30       | 31       | 32       | 33       | 34       | 35       | 36       | 37      | 38      | 39      | 40      | 41      | 42      | 43      | 44      | 45      |          |          |          |          |          |          |          |          |          |
| 18       | 27       | 28       | 29       | 30       | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38      | 39      | 40      | 41      | 42      | 43      | 44      | 45      |         |          |          |          |          |          |          |          |          |          |
| 19       | 28       | 29       | 30       | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39      | 40      | 41      | 42      | 43      | 44      | 45      |         |         |          |          |          |          |          |          |          |          |          |
| 20       | 29       | 30       | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40      | 41      | 42      | 43      | 44      | 45      |         |         |         |          |          |          |          |          |          |          |          |          |
| 21       | 30       | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41      | 42      | 43      | 44      | 45      |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 22       | 31       | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42      | 43      | 44      | 45      |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 23       | 32       | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43      | 44      | 45      |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 24       | 33       | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44      | 45      |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 25       | 34       | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45      |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 26       | 35       | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 27       | 36       | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 28       | 37       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 29       | 38       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 30       | 39       | 40       | 41       | 42       | 43       | 44       | 45       |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 31       | 40       | 41       | 42       | 43       | 44       | 45       |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 32       | 41       | 42       | 43       | 44       | 45       |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 33       | 42       | 43       | 44       | 45       |          |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 34       | 43       | 44       | 45       |          |          |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 35       | 44       | 45       |          |          |          |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 36       | 45       |          |          |          |          |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 37       |          |          |          |          |          |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
| 38       |          |          |          |          |          |          |          |          |          |          |          |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |

1. Adi  
 2. Adi  
 3. Adi  
 4. Adi  
 5. Adi  
 6. Adi  
 7. Adi  
 8. Adi  
 9. Adi  
 10. Adi  
 11. Adi  
 12. Adi  
 13. Adi  
 14. Adi  
 15. Adi  
 16. Adi  
 17. Adi  
 18. Adi  
 19. Adi  
 20. Adi  
 21. Adi  
 22. Adi  
 23. Adi  
 24. Adi  
 25. Adi  
 26. Adi  
 27. Adi  
 28. Adi  
 29. Adi  
 30. Adi  
 31. Adi  
 32. Adi  
 33. Adi  
 34. Adi  
 35. Adi  
 36. Adi  
 37. Adi  
 38. Adi  
 39. Adi  
 40. Adi  
 41. Adi  
 42. Adi  
 43. Adi



Class : 8A-EMS Course Code :

| Roll No | Name of the Student         | Date      | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---------|-----------------------------|-----------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|
| 180141  | Udaxa Aathish               | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180143  | Varagala Praveen Kumar      | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180145  | Pabodugu Gopi               | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180146  | Marthala Ravi Kumar         | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180147  | Baga Lavanya                | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180148  | Tadigalla Divisha Reddy     | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180149  | Kaluru Ramakrishna Reddy    | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180150  | Maddadugu Saranya           | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180151  | Madavathapu Varuni Sai      | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180152  | Shankar Shashibala Valsubai | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 180153  | Mohammed David              | 5/12/2019 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |

Title of the Paper : Principles of Management

| Roll No | Name of the Student         | Date      | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
|---------|-----------------------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| 41      | Udaxa Aathish               | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 43      | Varagala Praveen Kumar      | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 45      | Pabodugu Gopi               | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 46      | Marthala Ravi Kumar         | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 47      | Baga Lavanya                | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 48      | Tadigalla Divisha Reddy     | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 49      | Kaluru Ramakrishna Reddy    | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 50      | Maddadugu Saranya           | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 51      | Madavathapu Varuni Sai      | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 74      | Shankar Shashibala Valsubai | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
| 75      | Mohammed David              | 5/12/2019 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Siddhartha Nagar, VIJAYAWADA - 520 010, Andhra Pradesh  
Autonomous, NAAC A+ Grade, ISO Certified Institution



## 1.3.2 VALUE ADDED COURSE CERTIFICATE 2022 – 2023 (29)



Department of PHYSICS 2022 - 2023 Certificate Programmes

| Certificate number | Roll No | NAME                        |
|--------------------|---------|-----------------------------|
| AOC2022-23211201P  | 211201P | DAMISETTY DURGA PRASAD      |
| AOC2022-23211202P  | 211202P | KOTTEEDA PAVAN KUMAR        |
| AOC2022-23211204P  | 211204P | SARAGADA MADHU RAMA DURGA   |
| AOC2022-23211205P  | 211205P | GUNDAGANI SRAVANI           |
| AOC2022-23211206P  | 211206P | SHAIK SHAFIULLAH            |
| AOC2022-23211207P  | 211207P | INDUGULA SRINIVASA RAO      |
| AOC2022-23211208P  | 211208P | CHITROJU SWAMY YOGANAND     |
| AOC2022-23211209P  | 211209P | BANAVATH CHAITANYA NAIK     |
| AOC2022-23211210P  | 211210P | MANI SRAVANI NEELAM         |
| AOC2022-23211212P  | 211212P | PIDUGU VIJAY KUMAR          |
| AOC2022-23211213P  | 211213P | LINGINENI SAI SEKHAR        |
| AOC2022-23211214P  | 211214P | MYLA SIVA MANIKANTA         |
| AOC2022-23211215P  | 211215P | TANDRA HEMA SAI             |
| AOC2022-23211216P  | 211216P | MUTTIREDDY AMARNADH         |
| AOC2022-23211218P  | 211218P | RAVULAPATI CHATURVEDI       |
| AOC2022-23211219P  | 211219P | BEVARA PAVANI               |
| AOC2022-23211220P  | 211220P | DARAPANENI BHAVYA CHAITANYA |
| AOC2022-23211221P  | 211221P | BURADA BABY RENUKA          |
| AOC2022-23211223P  | 211223P | YENDUVA BALA SATYANARAYANA  |
| AOC2022-23211224P  | 211224P | SHAIK FAZAL                 |
| AOC2022-23211225P  | 211225P | PODUGU MAHESWARI            |
| AOC2022-23211227P  | 211227P | BANAVATHU HEMANTH NAYAK     |
| AOC2022-23211228P  | 211228P | BUPATHI SRINIVAS            |
| AOC2022-23211229P  | 211229P | BOGGAVARAPU SRI DHARANI     |
| AOC2022-23211230P  | 211230P | BATTINA BHAVANI KRISHNA     |
| AOC2022-23211231P  | 211231P | ALABANA DURGA               |
| AOC2022-23211232P  | 211232P | SYKAM BRAHMA REDDY          |
| AOC2022-23211234P  | 211234P | GARLAPATI DEVA DASU         |
| AOC2022-23211235P  | 211235P | GARIKAPATI KARTHIK          |
| AOC2022-23211236P  | 211236P | THAMMANA VISWANATH RAJU     |
| AOC2022-23211237P  | 211237P | BAYANA PRABHU CHAITANYA     |
| AOC2022-23211238P  | 211238P | YALAVARTHI JHANSI RANI      |
| AOC2022-23211239P  | 211239P | ALLU SURYA PRAKASH REDDY    |
| AOC2022-23211240P  | 211240P | BUDATI UTTEJ                |
| AOC2022-23211241P  | 211241P | NIKKU MIDHILESH             |
| AOC2022-23211242P  | 211242P | SHAIK KHAJA                 |
| AOC2022-23211243P  | 211243P | VALLURU CHIRUVENKAT         |
| AOC2022-23211244P  | 211244P | MEESALA PRAVEEN KUMAR       |
| AOC2022-23211246P  | 211246P | KARUBOTHU DURGA PRASAD      |
| AOC2022-23211261P  | 211261P | SHAIK AMEER HAMZA           |





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **DAMISETTY DURGA PRASAD (211201P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211201P



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **KOTTEEDA PAVAN KUMAR (211202P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211202P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SARAGADA MADHU RAMA DURGA (211204P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211204P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GUNDAGANI SRAVANI (211205P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211205P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SHAIK SHAFIULLAH (211206P)** has successfully completed  
**Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211206P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **INDUGULA SRINIVASA RAO (211207P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211207P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **CHITROJU SWAMY YOGANAND (211208P)** has  
successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by  
Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211208P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BANAVATH CHAITANYA NAIK (211209P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211209P



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MANI SRAVANI NEELAM (211210P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211210P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **PIDUGU VIJAY KUMAR (211212P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211212P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **LINGINENI SAI SEKHAR (211213P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211213P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MYLA SIVA MANIKANTA (211214P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211214P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **TANDRA HEMA SAI (211215P)** has successfully completed  
**Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211215P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MUTTIREDDY AMARNADH (211216P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211216P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **RAVULAPATI CHATURVEDI (211218P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211218P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BEVARA PAVANI (211219P)** has successfully completed **Add**  
**on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211219P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **DARAPANENI BHAVYA CHAITANYA (211220P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211220P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BURADA BABY RENUKA (211221P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211221P





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **YENDUVA BALA SATYANARAYANA (211223P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211223P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SHAIK FAZAL (211224P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211224P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **PODUGU MAHESWARI (211225P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211225P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BANAVATHU HEMANTH NAYAK (211227P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211227P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BUPATHI SRINIVAS (211228P)** has successfully completed  
**Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211228P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BOGGAVARAPU SRI DHARANI (211229P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211229P





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BATTINA BHAVANI KRISHNA (211230P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211230P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **ALABANA DURGA (211231P)** has successfully completed  
**Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211231P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SYKAM BRAHMA REDDY (211232P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211232P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GARLAPATI DEVA DASU (211234P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211234P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GARIKAPATI KARTHIK (211235P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211235P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **THAMMANA VISWANATH RAJU (211236P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211236P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BAYANA PRABHU CHAITANYA (211237P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211237P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **YALAVARTHI JHANSI RANI (211238P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211238P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **ALLU SURYA PRAKASH REDDY (211239P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211239P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BUDATI UTTEJ (211240P)** has successfully completed **Add**  
**on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211240P



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **NIKKU MIDHILESH (211241P)** has successfully completed  
**Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics,  
during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211241P





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SHAIK KHAJA (211242P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211242P



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **VALLURU CHIRUVENKAT (211243P)** has successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211243P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MEESALA PRAVEEN KUMAR (211244P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211244P**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **KARUBOTHU DURGA PRASAD (211246P)** has  
successfully completed **Add on Course (AOC)** on “**Solar Energy and its Applications**” conducted by  
Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

**AOC2022-23211246P**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SHAIK AMEER HAMZA (211261P)** has successfully completed **Add on Course (AOC)** on “Solar Energy and its Applications” conducted by Department of Physics, during the Academic 2022 - 2023.

Dr. M. Ramesh  
Principal

Dr. T. Srinivas Krishna  
HOD (I/C)

AOC2022-23211261P



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Siddhartha Nagar, VIJAYAWADA - 520 010, Andhra Pradesh  
Autonomous, NAAC A+ Grade, ISO Certified Institution



## 1.3.2 VALUE ADDED COURSE CERTIFICATE 2022 – 2023 (21)



**Department of Msc Computer science Certificate Programme - 2022-2023**

| <b>ROLL NO</b> | <b>NAME OF THE STUDENT</b>  | <b>CERTIFICATION PROGRAMME</b> | <b>COLLABORATION WITH OR ORGANIZED BY</b> |
|----------------|-----------------------------|--------------------------------|---|
| 21MCA26        | CHINTHALAPUDI DEVI DURGA    | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA37        | SAGAR GARIKAPATI            | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA49        | THIRUMALASETTY MALLIKARJUNA | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA50        | THIRUPATHI RAO TELLAMEKALA  | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA65        | KATTEDA KORESH BABU         | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA20        | SHAIK AMEER SOHEL           | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA59        | PRIYANKA GATTU              | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA06        | KALLEPALLI LOKESH KUMAR     | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA21        | HARIKA SRAVANI DEVARASETTY  | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA51        | ATHUKURI PRASANNA KUMAR     | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |
| 21MCA56        | KAVYA PALISETTY             | DATA SCIENCE TOOLS             | COGNITIVE CLASS.AI                        |



Learn ▾

What do you want to learn? 🔍

edX For Business



Home > Learn > Data Science > IBM: Data Science Tools



## IBM: Data Science Tools

★★★★ 4.3 stars 29 ratings

Learn about the most popular data science tools, including how to use them and what their features are.



7 weeks

3-7 hours per week



Self-paced

Progress at your own speed



Free

Optional upgrade available

Verified  
Certificate



This is to certify that

**Chagalamudi.Venkata Deepika**

successfully completed and received a  
passing grade in

**DS0105EN: Data Science Tools**

a course of study offered by IBM, an  
online learning initiative of IBM.

Romeo Kienzler  
Chief Data Scientist  
IBM

Maureen McElaney  
Developer Advocate  
IBM

Svetlana Levitan  
Senior Developer Advocate with IBM Center  
for Open Data and AI Technologies  
IBM



Verified Certificate  
Issued January 30, 2021

Valid Certificate ID  
[4189ea277c0a458a9611374c330ee067](#)





This is to certify that

**21MCA26 CHINTHALAPUDI  
DEVI DURGA**

successfully completed and received a passing grade in

**Data Science Tools**  
(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

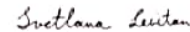
Issued by  
**Cognitive Class**



Romeo Kienzler  
Chief Data Scientist  
IBM



Maureen McElaney  
Developer Advocate  
IBM



Svetlana Levitan  
Senior Developer Advocate with IBM Center for Open Data and AI Technologies  
IBM

**October 20, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/f31134e23c384da48f25da276c11543c>

Certificate ID Number: f31134e23c384da48f25da276c11543c

October 20, 2022



This is to certify that

**Sagar Garikapati**

successfully completed and received a passing grade in

**Data Science Tools**  
(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

A handwritten signature in black ink, appearing to read "R. Kienzler".

Romeo Kienzler  
Chief Data Scientist  
IBM

A handwritten signature in black ink, appearing to read "Maureen McElaney".

Maureen McElaney  
Developer Advocate  
IBM





This is to certify that

**Thirumalasetty Mallikharjuna**

successfully completed and received a passing grade in

## Data Science Tools

(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)

Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

A handwritten signature in blue ink.

Romeo Kienzler  
Chief Data Scientist  
IBM

A handwritten signature in blue ink.

Maureen McElaney  
Developer Advocate  
IBM



*Svetlana Levitan*

Svetlana Levitan

Senior Developer Advocate with IBM Center for Open Data and AI Technologies  
IBM

**August 5, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/cfbe9f1db2d44714b98836251909cdaf>



This is to certify that

**TIRUPATHIRAO  
TELLAMEKALA**

successfully completed and received a passing grade in

**Data Science Tools**  
(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

10/17/22, 10:58 AM

IBM DS0105EN Certificate | Cognitive Class



Certificate ID Number: f8b15d04012a44818506bf78d6dd9e9f

October 17, 2022

<https://courses.cognitiveclass.ai/certificates/f8b15d04012a44818506bf78d6dd9e9f>

2/2



This is to certify that

**katteda koresh babu**

successfully completed and received a passing grade in

## Data Science Tools

(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

Romeo Kienzler  
Chief Data Scientist  
IBM

Maureen McElaney  
Developer Advocate  
IBM

<https://courses.cognitiveclass.ai/certificates/c635845a03cc4f2bbf00ebdf27912e4c>

1/2

Svetlana Levitan  
Senior Developer Advocate with IBM Center for Open Data and AI Technologies  
IBM

**October 17, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/c635845a03cc4f2bbf00ebdf27912e4c>





This is to certify that

**sk.Ameer Soheli**


successfully completed and received a passing grade in

## **Data Science Tools**

(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

  
Romeo Kienzler  
Chief Data Scientist  
IBM  
Maureen McElaney  
Developer Advocate  
IBM



This is to certify that

**Priyanka Gattu**

successfully completed and received a passing grade in

**Data Science Tools**  
(DS0105EN, provided by IBM)

A course on **cognitiveclass.ai**  
Powered by **IBM Developer Skills Network**.

Issued by  
**Cognitive Class**

A handwritten signature in black ink, appearing to read 'Romeo'.

Romeo Kienzler  
Chief Data Scientist  
IBM

A handwritten signature in black ink, appearing to read 'Maureen'.

Maureen McElaney  
Developer Advocate  
IBM

*Svetlana Levitan*

Svetlana Levitan

Senior Developer Advocate with IBM Center for Open Data and AI Technologies  
IBM

**June 21, 2023**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/96c0935d0af3432eb5cf6087c3d6810e>

Certificate ID Number: 96c0935d0af3432eb5cf6087c3d6810e

June 21, 2023



This is to certify that

**kallepalli Lokesh kumar**

successfully completed and received a passing grade in

## Data Science Tools

(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)

Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

Romeo Kienzler  
Chief Data Scientist  
IBM

Maureen McElaney  
Developer Advocate  
IBM



Svetlana Levitan

Senior Developer Advocate with IBM Center for Open Data and AI Technologies

IBM

February 2, 2023

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/f848eda1040644a9b7b3bdc01bc97e60>

Certificate ID Number:

f848eda1040644a9b7b3bdc01bc97e60

February 2, 2023



This is to certify that

**Harika Sravani Devarasetty**

successfully completed and received a passing grade in

**Data Science Tools**  
(DS0105EN, provided by IBM)

A course on **cognitiveclass.ai**  
Powered by **IBM Developer Skills Network**.

Issued by  
**Cognitive Class**

A handwritten signature in black ink, appearing to read 'Romeo'.

Romeo Kienzler  
Chief Data Scientist  
IBM

A handwritten signature in black ink, appearing to read 'Maureen'.

Maureen McElaney  
Developer Advocate  
IBM



This is to certify that

**ATHUKURI PRASANNA KUMAR**

successfully completed and received a passing grade in

**Data Science Tools**

(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)

Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

Romeo Kienzler  
Chief Data Scientist  
IBM

Maureen McElaney  
Developer Advocate  
IBM

Svetlana Levitan  
Senior Developer Advocate with IBM Center  
for Open Data and AI Technologies  
IBM

**February 1, 2023**

Authenticity of this certificate can be validated by going to:



This is to certify that

**KAVYA PALISETTY**

successfully completed and received a passing grade in

**Data Science Tools**  
(DS0105EN, provided by IBM)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

A handwritten signature in black ink.

Romeo Kienzler  
Chief Data Scientist  
IBM

A handwritten signature in black ink.

Maureen McElaney  
Developer Advocate  
IBM





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

Siddhartha Nagar, VIJAYAWADA - 520 010, Andhra Pradesh  
Autonomous, NAAC A+ Grade, ISO Certified Institution



## 1.3.2 VALUE ADDED COURSE CERTIFICATE 2022 – 2023 (24)



**Department of Msc Computer science Certificate Programme - 2022-2023**

| <b>ROLL NO</b> | <b>NAME OF THE STUDENT</b>                  | <b>CERTIFICATION PROGRAMME</b> | <b>COLLABORATION WITH OR ORGANIZED BY</b> |
|----------------|---|--------------------------------|---|
| 21CSC02        | TULASI KRISHNA DOKKU                        | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC07        | SYAMALA SRI RAVI CHANDRA VARNA GOTTUMUKKALA | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC10        | PARIMA SYAM BABU                            | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC12        | KOSANA BHUVANESWARI                         | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC15        | A.PREMJITH JOSHI                            | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC17        | JAGADEESH PANDIRIPALLI                      | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC20        | KORAKOPPULA CHINA VENKATESH                 | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21CSC34        | P.NAGA MALLESWARA RAO                       | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA01        | LIKITHA SRI DIVI                            | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA04        | KARANAM DIGVIJAY SOWJANYA CHANDRA           | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA08        | SUNAN JOY GUNJA                             | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA09        | VENKATA DURGA                               | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA12        | MURALA NAGA ALEKHYA                         | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA13        | GAYATHRI ATHYAM                             | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA16        | PRASANNA THOTA                              | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA17        | BADUGU KEERTHANA                            | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA18        | SAI MAMIDI PAAKA                            | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA19        | CHOKKAPU VINAY KUMAR                        | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA25        | LANKA NAGA SAI KISHORE                      | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |
| 21MCA34        | OLETI YASASWINI PRIYA                       | BLOCK CHAIN ESSENTIALS         | COGNITIVE CLASS.AI                        |

|         |                           |                           |                    |
|---------|---------------------------|---------------------------|--------------------|
| 21MCA36 | RASHEEDA<br>DUTHALURI     | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA42 | PALLAGANI TANUJA          | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA45 | SRAVYA CHENNU             | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA46 | CHITTURI NAVYA SRI        | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA47 | GUMMIDI KRISHNA<br>KUMARI | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA48 | KAMISETTY SAI<br>KUMAR    | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA54 | DIVYA KAKOLLU             | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |
| 21MCA57 | K VAASANTHI               | BLOCK CHAIN<br>ESSENTIALS | COGNITIVE CLASS.AI |





This is to certify that

**Tulasi Krishna Dokku**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 15, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/989528f522b444e2aa383e049f2a1b90>

Certificate ID Number: 989528f522b444e2aa383e049f2a1b90

October 15, 2022

<https://courses.cognitiveclass.ai/certificates/989528f522b444e2aa383e049f2a1b90>



This is to certify that

**SYAMALASRI RAVI CHANDRA  
VARMA GOTTUMUKKALA**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)

Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**September 13, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/e11ddc6263034ae39ca273f09c87fb09>







This is to certify that

**Parimi syam babu**

successfully completed and received a passing grade in

# Blockchain Essentials

(BC0101EN, provided by developerWorks)

A course on cognitiveclass.ai  
Powered by IBM Developer Skills Network.

Issued by  
Cognitive Class

**September 16, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/0fa2e6f1172c416492053610f0e0603e>





This is to certify that

**kosana bhuvaneswari**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://courses.cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**September 25, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/0d81e79e06f2407b871137b2a879b8e4>







This is to certify that

**A.Premjithjoshi**

successfully completed and received a passing grade  
in

**Blockchain  
Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
Cognitive Class

October 15, 2022

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/6d66e85b7e8145c3a31aa6db189242db>

Certificate ID Number: 6d66e85b7e8145c3a31aa6db189242db

October 15, 2022





This is to certify that

**Jagadeesh Pandiripalli**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

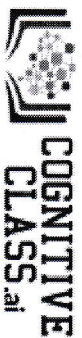
Issued by  
Cognitive Class

**October 17, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/839a2218447642e7b16de92910fcb1eb>







This is to certify that

**korakoppula china venkatesh**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
Cognitive Class

**September 26, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/8bade9272dcb4008a89bd7fe4dcf3138>



21C5C20



This is to certify that

**p.nagamalleswararao**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on cognitiveclass.ai  
Powered by IBM Developer Skills Network.

Issued by  
Cognitive Class

**September 26, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/1c27dfa11c974439bb84178362698895>





This is to certify that

**Likhitha Sri Divi**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 17, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/67791f4b877b45158996bdb34127e78d>

Certificate ID Number: 67791f4b877b45158996bdb34127e78d

October 17, 2022





This is to certify that

**KARANAM DIGVIJAY  
SOWJANYA CHANDRA**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 19, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/26fedc300b3f4757809816ad129fb110>



This is to certify that

**SusanJoy Gunja**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 20, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/a416543b572542eea38a6192ae4e7c9d>



This is to certify that

**venkata durga**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on **cognitiveclass.ai**  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 17, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/63d4fabfad914aca945b11a2da6bf67c>

Certificate ID Number: 63d4fabfad914aca945b11a2da6bf67c

October 17, 2022



This is to certify that

**Murala Naga Alekhya**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://courses.cognitiveclass.ai)

Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 19, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/a842794a39d640929dfa00c77b569140>

Certificate ID Number: **a842794a39d640929dfa00c77b569140**

**October 19, 2022**





This is to certify that

**Gayathri Athyam**

successfully completed and received a passing grade in

**Moving Data into Hadoop**  
(BD0131EN, provided by Big Data University)

A course on [cognitiveclass.ai](https://courses.cognitiveclass.ai)

Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

Big Data University

**October 17, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/3fa34693f9b44c4594cfc3e73d4f6c09>



This is to certify that

**Prasanna Thota**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 22, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/8e0743cabe5f4ca3b1322bce18c77aaa>

Certificate ID Number: **8e0743cabe5f4ca3b1322bce18c77aaa**

**October 22, 2022**

<https://courses.cognitiveclass.ai/certificates/8e0743cabe5f4ca3b1322bce18c77aaa>

1/1



This is to certify that

**21MCA17 BADUGU  
KEERTHANA**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 21, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/56c5a99d0f9848e6a6deb7bf51a9f1fc>



This is to certify that

**Sai Mamidipaka**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 20, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/6d9161186c864d30b2c2787d6245223c>

Certificate ID Number: 6d9161186c864d30b2c2787d6245223c

October 20, 2022





This is to certify that

**chokkapu vinay kumar**

successfully completed and received a passing grade in

**Blockchain Essentials**

(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 20, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/eba36584d2024ef6915a291bcb4c9dca>

Certificate ID Number: eba36584d2024ef6915a291bcb4c9dca

October 20, 2022



This is to certify that

**Lanka Naga Sai Kishore**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on **cognitiveclass.ai**  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

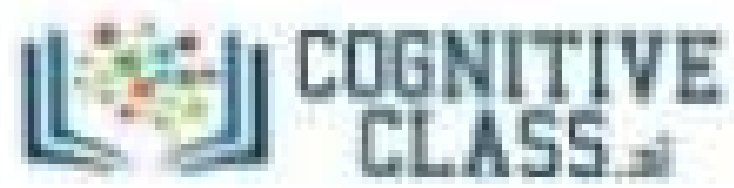
**October 22, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/ff8c8a9b9d764762a615260cc8aa5f5f>

Certificate ID Number: **ff8c8a9b9d764762a615260cc8aa5f5f**

**October 22, 2022**



This is to certify that

**OLETI YASASWINI PRIYA**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network

Issued by  
**Cognitive Class**

**October 19, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/46343f5c948043c5a317d53d4c36b841>



This is to certify that

**Rasheeda Duthaluri**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 22, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/508dddd8e27f458799069854074d6c70>





This is to certify that

**Pallagani Thanuja**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 22, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/6027172f364443b89e0ffbd21f44cda1>

Certificate ID Number: 6027172f364443b89e0ffbd21f44cda1

October 22, 2022

<https://courses.cognitiveclass.ai/certificates/6027172f364443b89e0ffbd21f44cda1>

1/1



This is to certify that

**Sravya Chennu**

successfully completed and received a passing grade in

**Blockchain Essentials**

(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 17, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/46197cdbbb604997b018646509eaba5c>

Certificate ID Number: 46197cdbbb604997b018646509eaba5c

October 17, 2022



This is to certify that

**Chitturi Navya Sree**

successfully completed and received a passing grade in

**Blockchain Essentials**

(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 21, 2022**

Authenticity of this certificate can be validated by going to:

<https://courses.cognitiveclass.ai/certificates/69f369acfd9b4a04a7d10db49006cb22>

Certificate ID Number: 69f369acfd9b4a04a7d10db49006cb22

October 21, 2022



This is to certify that

**Gummidi Krishna Kumari**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 21, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/a63643c5c0fd44178fef25060e9baee9>





Certificate ID Number: 94da27f0e572475bb30bb1016393212c

October 17, 2022



This is to certify that

**Divya kakollu**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 23, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/ab73906c7139493a9a90f02f2f77cdfd>

Certificate ID Number: **ab73906c7139493a9a90f02f2f77cdfd**

**October 23, 2022**

<https://courses.cognitiveclass.ai/certificates/ab73906c7139493a9a90f02f2f77cdfd>

1/1



This is to certify that

**k vasanthi**

successfully completed and received a passing grade in

**Blockchain Essentials**  
(BC0101EN, provided by developerWorks)

A course on [cognitiveclass.ai](https://cognitiveclass.ai)  
Powered by IBM Developer Skills Network.

Issued by  
**Cognitive Class**

**October 22, 2022**

Authenticity of this certificate can be validated by going to:  
<https://courses.cognitiveclass.ai/certificates/0b09489f435d470c9716539d77f53a9d>



# Declaration of Completion

**Ashok Kumar Sahoo**

has successfully completed the online course:

**Digital Marketing 101**

This professional has demonstrated initiative and a commitment to deepening their skills and advancing their career. Well done!

31<sup>st</sup> Mar 2022

Certificate code : 3359043

**Krishna Kumar**  
CEO



| <b>LIST OF STUDENTS -VACANAT01 - 2018-19</b> |   |                        |              |
|--|---|------------------------|--------------|
| <b>SNO</b>                                   | <b>NAME OF THE STUDENT(AS PER X CLASS )</b> | <b>ROLL<br/>NUMBER</b> | <b>GRADE</b> |
| 1  | BOMMISSETTY CHOWDESWARA RAO                 | 184827                 | A            |
| 2  | VALLEPU SRINIVAS                            | 184828                 | A            |
| 3  | NAGA REVATHI NIMMA                          | 184829                 | C            |
| 4  | POLAVARAPU DHANROHAN BHARADWAJ              | 184830                 | B            |
| 5  | KAPALLI MADHURYA KEERTHI                    | 184831                 | C            |
| 6  | SEERAM GEETHIKA SRI LAKSHMI                 | 184832                 | C            |
| 7  | PIDIKITI KARTHIK                            | 184833                 | A            |
| 8  | ERUVURU PARASURAM BHARATH                   | 184834                 | A            |
| 9  | SK.IRFAN FAISAL MOHAMMED                    | 184835                 | B            |
| 10   | CHANGAVALLI VINDHYA VASINI                  | 184836                 | B            |
| 11   | NALLAMOTHU RAHUL                            | 184871                 | B            |
| 12   | KHUSHBOO DOSHI                              | 184872                 | C            |



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **BOMMISSETTY CHOWDESWARA RAO (184827)** has  
successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by  
Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184827



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **VALLEPU SRINIVAS (184828)** has successfully completed  
**Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business  
Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

**VAC2018-19184828**



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **NAGA REVATHI NIMMA (184829)** has successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

**VAC2018-19184829**





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **POLAVARAPU DHANROHAN BHARADWAJ (184830)** has successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184830



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **KAPALLI MADHURYA KEERTHI (184831)** has successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184831



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SEERAM GEETHIKA SRI LAKSHMI (184832)** has  
successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by  
Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184832



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **PIDIKITI KARTHIK (184833)** has successfully completed  
**Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business  
Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184833





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **ERUVURU PARASURAM BHARATH (184834)** has  
successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by  
Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184834



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **SK.IRFAN FAISAL MOHAMMED (184835)** has successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184835



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **CHANGAVALLI VINDHYA VASINI (184836)** has successfully completed **Value added Course (VAC)** on “*Principles of Management*” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184836



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **NALLAMOTHU RAHUL (184871)** has successfully completed  
**Value added Course (VAC)** on “**Principles of Management**” conducted by Department of Business  
Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184871





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. ***KHUSHBOO DOSHI (184872)*** has successfully completed  
**Value added Course (VAC)** on “***Principles of Management***” conducted by Department of Business  
Analytics, during the Academic ***2018-2019***.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

**VAC2018-19184872**

| <b>LIST OF STUDENTS -VACANAT02 - 2018-19</b> |   |                        |              |
|--|---|------------------------|--------------|
| <b>SNO</b>                                   | <b>NAME OF THE STUDENT(AS PER X CLASS )</b> | <b>ROLL<br/>NUMBER</b> | <b>GRADE</b> |
| 1  | NAGA VENKATA SAI AJAY KUMAR PESALA          | 184801                 | B            |
| 2  | MAHANKALI NANDINI                           | 184802                 | C            |
| 3  | GADDE SAHITI                                | 184803                 | C            |
| 4  | MAHANKALI RNVLN RAVI TEJA                   | 184804                 | A            |
| 5  | NARAMANCHI VASAVI                           | 184805                 | A            |
| 6  | GANDHAM SAI KRISHNA                         | 184806                 | A            |
| 7  | GANDAMSETTY SAI VEERA NAGA SURYA<br>KOUSHIK | 184807                 | A            |
| 8  | GINJUPALLI BINDU SRI                        | 184808                 | C            |
| 9  | KURAKULA TARUN                              | 184809                 | B            |
| 10   | MADDALI SAI SANKAR CHAKRADHAR               | 184810                 | C            |



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **NAGA VENKATA SAI AJAY KUMAR PESALA (184801)**  
has successfully completed **Value added Course (VAC)** on “*Statistical Data Analysis Using JASP*”  
conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184801



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MAHANKALI NANDINI (184802)** has successfully completed  
**Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of  
Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184802





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GADDE SAHITI (184803)** has successfully completed **Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184803



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MAHANKALI RNVLN RAVI TEJA (184804)** has successfully completed **Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184804



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **NARAMANCHI VASAVI (184805)** has successfully completed  
**Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of  
Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184805



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GANDHAM SAI KRISHNA (184806)** has successfully completed **Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184806





# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GANDAMSETTY SAI VEERA NAGA SURYA Koushik**  
**(184807)** has successfully completed **Value added Course (VAC)** on “**Statistical Data Analysis**  
**Using JASP**” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184807



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **GINJUPALLI BINDU SRI (184808)** has successfully completed **Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184808



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-

Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **KURAKULA TARUN (184809)** has successfully completed  
**Value added Course (VAC)** on “**Statistical Data Analysis Using JASP**” conducted by Department of  
Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184809



# PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE

An Autonomous College under the Jurisdiction of Krishna University.

College with Potential for Excellence ( AWARDED BY THE UGC) Re-  
Accredited (A+) Grade by the NAAC

Siddhartha Nagar, Vijayawada, Andhra Pradesh-10.

## *Course completion certificate*

This is to certify that Mr. / Ms. **MADDALI SAI SANKAR CHAKRADHAR (184810)** has  
successfully completed **Value added Course (VAC)** on “*Statistical Data Analysis Using JASP*”  
conducted by Department of Business Analytics, during the Academic **2018-2019**.

Dr. M. Ramesh  
Principal

Dr. P. Guru Prasad  
Head(i/c) of the Department

VAC2018-19184810