

VAC134	3D PRINTING TECHNOLOGY
Contact Hours	30 Hours
Prerequisite	Nil

Course Description

This comprehensive 30-hour course is designed to provide participants with a deep understanding of 3D Printing Technology, from the fundamentals to advanced applications. Whether you're a beginner or an experienced user, this course will enhance your knowledge and skills in utilizing 3D printing for various purposes.

Course Objectives

Students will be able to:

- Explain the core principles of 3D Printing Technology.
- Demonstrate the ability to set up and calibrate a 3D printer.
- Create and modify 3D models suitable for 3D printing.
- Explore and articulate the applications of 3D printing in various industries.
- Apply advanced 3D printing techniques, including multi-material and multi-color printing.

Course Outcomes

On completion of this course, students will be able to:

CO 1: Set up and operate a 3D printer efficiently.

CO 2: Navigate and use 3D modeling software for designing printable objects.

CO 3: Analyze and troubleshoot common issues in the 3D printing process.

CO 4: Apply advanced 3D printing techniques, including multi-material and multi-color printing.

CO 5: Optimize 3D models for successful and efficient printing.

Course Content

Module I: Introduction to 3D Printing

3 hours

- Overview of 3D Printing Technology
- Historical evolution and milestones
- Types of 3D printers and their applications
- Importance of 3D printing in various industries

Module II: Basic Principles of 3D Printing

4 hours

- Understanding the concept of additive manufacturing
- Materials used in 3D printing
- Overview of 3D printing processes (FDM, SLA, SLS, etc.)
- Reading and interpreting 3D models and files

Module III: Setting Up a 3D Printer**3 hours**

- Assembling and calibrating a 3D printer
- Software installation and configuration
- Troubleshooting common printing issues

Module IV: 3D Modeling for Printing**5 hours**

- Introduction to 3D modeling software (e.g., TinkerCAD, Fusion 360)
- Creating and modifying 3D models
- Optimizing models for 3D printing
- Hands-on exercises in modeling

Module V: Advanced 3D Printing Techniques**6 hours**

- Multi-material and multi-color printing
- Support structures and rafts
- Print settings and parameters
- Post-processing techniques

Module VI: Applications of 3D Printing**5 hours**

- Prototyping and product development
- Medical applications (prosthetics, implants)
- Aerospace and automotive applications
- Consumer products and customization

Module VII: Future Trends in 3D Printing**4 hours**

- Emerging technologies in 3D printing
- Industry trends and predictions
- Opportunities and challenges

Practicum

1. Students will have supervised hands-on experience setting up and operating 3D printers.
2. Students will collaborate in groups to design and model an object using 3D modeling software.
3. Students will work on a final 3D printing project, integrating the skills and knowledge acquired throughout the course.

Textbooks

Gibson, I., Rosen, D., & Stucker, B. (2015). Additive Manufacturing Technologies: 3D Printing, Rapid Prototyping, and Direct Digital Manufacturing. Publisher.

Gibson, M. (2015). Introduction to 3D Printing. Publisher.

Reference Books

Barnatt, C. (2016). 3D Printing: Third Edition. Publisher.

Coiffet, P., & André, J.-C. (2021). 3D Printing and Additive Manufacturing: Principles of the Technology with Selected Applications. Publisher.

Garg, R. K., & Bose, S. (2020). Additive Manufacturing: 3D Printing for Prototyping and Manufacturing. Publisher.

	Evaluation Component	Weightage (%)
1	Activities	20
2	Project	20
3	Attendance	10
4	End Term Examination	50

Registrar
K.R. Mangalam University
Sohna Road, Gurugram (Haryana)



K.R. MANGALAM UNIVERSITY
E D U C A T I O N F O R L I F E
(Recognized by UGC and a member of AIU)

Ref.No.:KRMU/Admin./Notice/2022-2023/ 3067(A)

Dated: 02nd August, 2022

NOTICE

This is to put for information that School of Engineering & Technology is offering Value-Added Course (VAC) for all interested students during Odd Semester as per the following specifications.

Course Code	Course Title	Coordinating Department / School	Duration
ETCS813A	Software Engineering Applications	SOET	30 Hrs.
VAC131	Employability and Analytical Skills-I	SOET	30 Hrs.
VAC132	Employability and Analytical Skills- II	SOET	30 Hrs.
VAC133	Employability and Analytical Skills-III	SOET	30 Hrs.
VAC134	3D Printing Technology	SOET	30 Hrs.
VAC135	Renewable Energy Systems	SOET	30 Hrs.

Maximum 100 seats are available for the course.

Course Start Date: 05 September 2022

Course End Date: 29 December 2022

All interested students are required to confirm their registration with the Dean-School of Engineering & Technology latest by **24th August, 2022**

Maleja

Registrar

Registrar

Copy to: K.R. Mangalam University
Sector 10, Gurugram (Haryana)

For kind information

- Vice Chancellor
- Dean (Academics Affairs)
- Controller of Examinations
- All Deans/ School Coordinators
- All Faculty Members/ Mentors
- Notice Board
- Office Copy

[Signature]

Registrar

K.R. Mangalam University
Sector 10, Gurugram (Haryana)



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

ROLL NO	NAME	PROGRAMM	SEMESTER	5-Sep-22	8-Sep-22	10-Sep-22	12-Sep-22	15-Sep-22	17-Sep-22
2201560003	KHUSHANK BISHARYA	MCA	Semester-I	P	P	P	P	P	P
2201560001	LOKESH JAIN	MCA	Semester-I	P	P	P	A	P	P
2009200006	DERRIC MICHAEL RAJ	B.A. (JMC)	Semester-V	P	P	P	P	A	P
2201560005	DARSHIT RAGHAV	MCA	Semester-I	P	P	P	P	P	P
2201560006	NANCY	MCA	Semester-I	P	P	P	P	P	P
2201560007	PRATIBHA	MCA	Semester-I	P	P	P	P	P	P
2201560021	SWETA TEWATIA	MCA	Semester-I	P	P	P	P	P	P
2201560029	NISHANT	MCA	Semester-I	A	P	P	P	P	P
2201560031	SWORAJ SAHOO	MCA	Semester-I	P	P	P	P	P	P
2201560026	PRASHANT KUMAR MAJUMDAR	MCA	Semester-I	P	P	P	P	P	P
2201560027	AMAN VERMA	MCA	Semester-I	P	P	P	P	P	P
2201560025	ISHIKA	MCA	Semester-I	P	P	P	P	P	P
2201560017	MANSI NEGI	MCA	Semester-I	P	P	P	P	P	P
2201560008	ELEENA	MCA	Semester-I	P	P	P	P	P	P
2201560012	SONALI ROUT	MCA	Semester-I	P	P	P	P	P	P
2201560018	JAYA TOMAR	MCA	Semester-I	P	P	P	P	P	P
2201560023	NEHA SAINI	MCA	Semester-I	A	P	P	P	A	A
2201560016	ADITYA SINGH	MCA	Semester-I	P	P	P	P	A	P
2201560015	SAROJ CHOUDHARY	MCA	Semester-I	P	P	P	P	P	P
2201560014	SUMIT KUMAR SHARMA	MCA	Semester-I	P	P	P	P	P	A
2201560024	SURAJ SAURAV	MCA	Semester-I	A	P	P	P	P	P
2201560009	SAGAR	MCA	Semester-I	A	P	P	P	A	P
2201560011	ROHAN SHARMA	MCA	Semester-I	P	P	P	P	A	P
2201560040	PIYUSH	MCA	Semester-I	A	P	P	P	P	P
2201560043	SAKSHI	MCA	Semester-I	P	P	P	P	P	P
2201560048	ANSHUL YADAV	MCA	Semester-I	P	P	P	P	P	P
2201560050	ABHISHEK BISHT	MCA	Semester-I	P	P	P	P	P	P

COURSE INCHARGE
Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)
DEAN
School of Engineering & Technology (SOET)
K.F. Mangalam University



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	22-Sep-22	22-Sep-22	22-Sep-22	24-Sep-22	26-Sep-22	29-Sep-22	1-Oct-22	3-Oct-22	6-Oct-22	8-Oct-22	10-Oct-22
KHUSHANK BISHARYA	P	P	P	P	P	P	P	P	P	P	P
LOKESH JAIN	P	A	P	P	P	P	P	P	P	A	P
DERRIC MICHAEL RAJ	P	P	P	P	P	P	P	P	P	P	P
DARSHIT RAGHAV	A	P	P	P	P	P	P	P	P	P	A
NANCY	P	P	P	P	P	P	P	P	P	P	P
PRATIBHA	P	P	P	P	P	P	P	P	P	P	A
SWETA TEWATIA	A	P	P	P	P	P	P	P	P	P	P
NISHANT	P	P	P	P	P	P	P	P	P	P	A
SWORAJ SAHOO	P	P	P	P	P	P	P	P	P	A	P
PRASHANT KUMAR MAJUMDAR	P	P	P	P	P	P	P	P	P	P	P
AMAN VERMA	P	A	P	P	P	P	P	A	P	P	A
ISHIKA	P	P	P	P	P	P	P	P	P	P	A
MANSI NEGI	P	P	P	P	P	P	P	P	P	P	A
ELEENA	P	A	P	P	P	P	P	P	P	P	P
SONALI ROUT	P	P	P	P	P	P	P	P	A	P	P
JAYA TOMAR	P	P	P	P	P	P	P	P	P	P	P
NEHA SAINI	P	P	P	P	P	P	P	P	P	P	P
ADITYA SINGH	P	P	P	P	P	P	P	P	A	P	P
SAROJ CHOUDHARY	P	P	P	P	A	P	P	P	P	P	P
SUMIT KUMAR SHARMA	P	P	P	P	P	P	P	P	P	P	P
SURAJ SAURAV	P	A	P	P	P	P	P	P	P	A	A
SAGAR	P	P	P	P	P	P	P	P	A	P	P
ROHAN SHARMA	P	P	P	A	P	P	P	A	P	P	A
PIYUSH	P	P	P	P	P	P	P	P	P	P	A
SAKSHI	P	P	P	P	P	P	A	P	P	A	P
ANSHUL YADAV	P	P	P	P	P	P	P	A	P	P	P
ABHISHEK BISHT	P	P	P	P	P	P	P	P	P	P	A

Amr

COURSE INCHARGE

Registrar

K.R. Mangalam University
Sohna Road Gurugram (Haryana)

DEAN

School of Engineering & Technology (SOET)
K.R. Mangalam University
Sohna road, Gurugram



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	13-Oct-22	15-Oct-22	17-Oct-22	20-Oct-22	22-Oct-22	23-Oct-22	24-Oct-22	27-Oct-22	29-Oct-22
KHUSHANK BISHARYA	P	P	P	P	P	P	P	A	P
LOKESH JAIN	A	P	P	P	P	P	P	P	P
DERRIC MICHAEL RAJ	P	P	P	P	P	P	A	P	P
DARSHIT RAGHAV	P	P	P	A	P	P	P	P	A
NANCY	P	P	P	A	A	P	P	P	A
PRATIBHA	P	P	P	P	P	A	P	P	A
SWETA TEWATIA	P	A	P	P	P	P	P	P	P
NISHANT	P	P	P	P	P	P	P	P	A
SWORAI SAHOO	P	P	A	P	P	P	P	P	A
PRASHANT KUMAR MAJUMDAR	A	A	A	A	P	A	A	P	P
AMAN VERMA	P	P	P	P	P	P	P	P	P
ISHIKA	P	P	P	P	A	P	P	P	P
MANSI NEGI	P	P	P	P	P	P	A	P	P
ELEENA	P	P	P	A	A	P	P	P	P
SONALI ROUT	P	P	P	P	P	P	A	P	P
JAYA TOMAR	P	A	P	A	P	P	A	P	P
NEHA SAINI	P	P	P	P	P	P	P	P	P
ADITYA SINGH	P	P	P	P	P	P	P	P	P
SAROJ HOUDHARY	P	P	P	P	P	P	P	P	P
SUMIT KUMAR SHARMA	P	P	P	P	P	P	P	A	P
SURAJ AURAV	A	P	P	P	P	P	P	P	P
SAGAR	P	P	P	P	P	P	A	P	P
ROHAN SHARMA	P	P	P	A	A	P	P	P	P
PIYUSH	P	P	P	P	P	P	P	P	P
SAKSHI	P	P	A	P	A	P	P	P	P
ANSHUL YADAV	P	P	P	A	A	P	P	P	A
ABHISHEK BISHT	P	P	P	P	P	A	P	P	A

COURSE INCHARGE



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	31-Oct-22	1-Nov-22	5-Nov-22	7-Nov-22	10-Nov-22	12-Nov-22	14-Nov-22	17-Nov-22	19-Nov-22
KHUSHANK BISHARYA	P	P	P	P	P	P	P	P	P
LOKESH JAIN	A	P	P	A	P	P	P	P	P
DERRIC MICHAEL RAJ	P	P	P	P	P	P	P	P	P
DARSHIT RAGHAV	P	P	P	P	P	P	P	P	A
NANCY	P	P	P	P	P	P	P	P	A
PRATIBHA	P	A	P	P	P	P	P	P	P
SWETA TEWATIA	P	P	P	P	P	P	P	P	P
NISHANT	P	A	P	P	P	P	P	P	P
SWORAJ SAHOO	P	P	P	P	P	P	P	P	P
PRASHANT KUMAR MAJUMDAR	P	P	P	P	P	P	P	P	P
AMAN VERMA	P	P	P	A	P	P	P	P	A
ISHIKA	P	P	P	A	P	P	P	A	P
MANSI NEGI	P	P	P	P	P	P	P	P	P
ELEENA	P	P	P	A	P	P	A	P	P
SONALI ROUT	P	P	P	P	P	P	A	P	P
JAYA TOMAR	A	P	P	P	P	P	P	P	P
NEHA SAINI	P	P	P	P	P	P	P	P	P
ADITYA SINGH	P	P	P	P	P	P	P	P	P
SAROJ CHOUDHARY	A	P	P	P	P	A	P	P	P
SUMIT KUMAR SHARMA	P	P	P	P	P	P	P	P	P
SURAJ SAURAV	A	P	P	A	P	P	P	P	P
SAGAR	P	P	P	P	P	P	P	P	P
ROHAN SHARMA	P	P	P	P	A	P	P	P	A
PIYUSH	P	P	P	P	P	P	P	P	P
SAKSHI	P	P	P	P	P	P	P	A	P
ANSHUL YADAV	P	P	P	P	P	P	P	P	A
ABHISHEK BISHT	P	P	P	P	P	P	P	P	P

COURSE INCHARGE

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

Dean
Engineering & Technology
K.R. Mangalam University
Sohna Road, Gurugram



ATTENDANCE SHEET

VAC COURSE FOR ACADEMIC YEAR 2022-23

COURSE CODE: VAC134

COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	21-Nov-22	24-Nov-22	26-Nov-22	28-Nov-22	1-Dec-22	3-Dec-22	5-Dec-22	8-Dec-22	10-Dec-22	12-Dec-22
KHUSHANK BISHARYA	P	P	P	P	P	P	P	P	P	P
LOKESH JAIN	P	A	P	A	P	P	P	P	P	P
DERRIC MICHAEL RAJ	P	P	P	P	P	P	P	P	P	P
DARSHIT RAGHAV	P	P	A	P	P	P	P	P	P	P
NANCY	P	P	P	P	P	P	P	A	P	P
PRATIBHA	P	P	P	P	P	P	P	P	P	P
SWETA TEWATIA	P	A	A	A	P	P	P	P	P	P
NISHANT	P	P	P	P	P	P	P	P	P	P
SWORAJ SAHOO	P	A	P	P	P	A	P	A	P	P
PRASHANT KUMAR MAJUMDAR	P	P	P	A	A	A	A	P	A	P
AMAN VERMA	P	P	A	P	P	P	P	P	P	P
ISHIKA	P	P	A	P	P	P	P	A	P	P
MANSI NEGI	P	P	A	P	P	P	P	P	P	A
ELEENA	P	P	P	P	P	P	A	A	P	P
SONALI ROUT	A	P	P	P	P	P	P	P	P	A
JAYA TOMAR	P	P	P	P	A	P	A	P	P	A
NEHA SAINI	P	P	P	P	P	P	P	P	P	P
ADITYA SINGH	A	P	P	P	P	P	P	P	P	P
SAROJ CHOUDHARY	P	P	P	P	P	P	P	P	P	P
SUMIT KUMAR SHARMA	P	P	P	P	P	P	P	P	P	P
SURAJ SAURAV	P	A	A	A	P	P	P	P	P	P
SAGAR	A	P	P	P	P	P	P	P	P	A
ROHAN SHARMA	P	P	A	P	P	P	A	A	P	P
PIYUSH	P	P	A	P	P	P	P	P	P	P
SAKSH	P	A	P	P	P	A	P	A	P	P
ANSHU L YADAV	P	P	P	P	P	P	A	A	P	P
ABHISHI K BISHT	P	P	A	P	P	P	P	P	A	P

COURSE INCHARGE

Registrar
K.R. Mangalam University
Cakna Road Gurugram, (Haryana)

School of Engineering & Technology
K.R. Mangalam University
Sector Road, Gurugram



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	15-Dec-22	17-Dec-22	19-Dec-22	22-Dec-22	24-Dec-22	26-Dec-22	29-Dec-22	Total	Present	Percentage
KHUSHANK BISHARYA	A	P	P	P	A	P	P	51	47	92.16
LOKESH JAIN	P	P	A	P	P	P	P	51	41	80.39
DERRIC MICHAEL RAJ	P	P	P	P	P	P	P	51	48	94.12
DARSHIT RAGHAV	P	A	P	P	P	P	P	51	43	84.31
NANCY	P	A	P	P	P	P	P	51	44	86.27
PRATIBHA	A	P	P	P	A	P	P	51	44	86.27
SWETA TEWATIA	P	P	A	P	P	P	P	51	44	86.27
NISHANT	A	P	P	P	A	P	P	51	45	88.24
SWORAJ SAHOO	P	A	P	P	P	P	P	51	43	84.31
PRASHANT KUMAR MAJUMDAR	P	P	P	P	P	P	P	51	39	76.47
AMAN VERMA	P	A	P	P	P	P	P	51	43	84.31
ISHIKA	P	A	P	P	P	P	P	51	45	88.24
MANSI NEGI	P	A	P	P	P	P	A	51	41	80.39
ELEENA	P	P	P	P	P	P	P	51	45	88.24
SONALI ROUT	P	P	P	P	P	P	P	51	41	80.39
JAYA TOMAR	P	P	A	P	P	P	P	51	48	94.12
NEHA SAINI	P	P	P	P	P	P	P	51	47	92.16
ADITYA SINGH	P	P	P	P	P	P	A	51	45	88.24
SAROJ CHOUDHARY	P	P	A	P	A	P	P	51	46	90.20
SUMIT KUMAR SHARMA	A	P	P	P	P	P	A	51	39	76.47
SURAJ SAURAV	P	P	A	P	P	P	P	51	45	88.24
SAGAR	P	P	P	P	P	P	P	51	39	76.47
ROHAN SHARMA	P	P	P	P	P	P	P	51	47	92.16
PIYUSH	P	P	P	P	P	P	P	51	42	82.35
SAKSHI	P	P	P	P	P	P	P	51	41	80.39
ANSHUL YADAV	P	A	P	P	P	P	P	51	43	84.31
ABHISHEK BISHT	P	A	P	P	P	P	P	51	43	84.31



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

ROLL NO	NAME	PROGRAMM	SEMESTER	5-Sep-22	8-Sep-22	10-Sep-22	12-Sep-22	15-Sep-22	17-Sep-22
2201560051	SAKSHI RAI	MCA	Semester-I	P	P	P	P	P	A
2201560046	SHIVANI	MCA	Semester-I	P	P	P	P	P	P
2201560042	RAHUL	MCA	Semester-I	P	P	P	P	P	P
2201560045	SPARSH GARG	MCA	Semester-I	P	P	P	P	P	P
2201560032	RITIK	MCA	Semester-I	A	P	P	P	P	P
2201560044	JEETU POSWAL	MCA	Semester-I	P	P	P	P	P	P
2201560041	ABHISHEK PATHAK	MCA	Semester-I	P	P	P	P	P	P
2201560036	AKASH MAHATO	MCA	Semester-I	A	P	P	P	P	P
2201560039	NIKHIL KUMAR	MCA	Semester-I	P	P	P	P	A	P
2201560034	SIMRAN KATARIYA	MCA	Semester-I	P	A	P	P	P	P
2201560033	ROHIT YADAV	MCA	Semester-I	A	P	P	P	P	P
2201560038	SUKHDEV RAWAT	MCA	Semester-I	P	P	P	P	P	P
2201560035	SAHIL	MCA	Semester-I	P	P	P	P	P	P
2201560037	JITENDER VATS	MCA	Semester-I	P	P	P	P	P	P
2201560020	DHEERAJ	MCA	Semester-I	P	P	P	P	P	P
2201560028	ANJALI SARKAR	MCA	Semester-I	A	P	P	P	P	P
2201560047	ABHISHEK	MCA	Semester-I	P	P	P	P	P	P
2201560010	CHIRAG PATHAK	MCA	Semester-I	P	P	P	P	P	P
2113820020	MAYANK SINGHANIA	B.Sc. (H)							
2201560004	VISHANK RANA	Agriculture	Semester-III	P	P	P	P	P	P
2201560019	MAYANK KUMAR	MCA	Semester-I	A	P	P	P	A	A
2201560030	AMIT THAKUR	MCA	Semester-I	P	P	P	P	A	P
2201560049	SANDEEP KUMAR	MCA	Semester-I	A	P	P	P	P	P
2201560052	HARSH TOMAR	MCA	Semester-I	P	P	P	P	P	P

Ram
COURSE INCHARGE

Dr. Jyoti

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

DEAN
School of Engineering & Technology
K.R. Mangalam University
Sohna Road, Gurugram



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	22-Sep-22	22-Sep-22	22-Sep-22	24-Sep-22	26-Sep-22	29-Sep-22	1-Oct-22	3-Oct-22	6-Oct-22	8-Oct-22	10-Oct-22
SAKSHI RAI	P	P	P	P	P	P	P	A	P	P	P
SHIVANI	P	P	P	P	P	P	P	P	P	A	P
RAHUL	P	P	P	P	P	P	P	P	P	P	P
SPARSH GARG	P	P	A	P	P	P	P	A	P	P	A
RITIK	P	P	P	P	P	P	P	P	P	P	P
JEETU POSWAL	P	P	A	P	P	A	P	P	P	P	P
ABHISHEK PATHAK	P	P	A	P	P	A	P	P	A	P	P
AKASH MAHATO	P	P	P	P	P	P	P	P	P	P	P
NIKHIL KUMAR	P	P	P	P	P	P	P	P	P	P	P
SIMRAN KATARIYA	P	P	P	P	P	P	P	P	A	P	P
ROHIT YADAV	A	A	A	P	A	P	P	P	P	P	P
SUKHDEV RAWAT	P	P	P	P	P	P	P	P	P	A	P
SAHIL	P	P	P	P	P	P	P	P	P	P	P
JITENDER VATS	P	P	A	P	P	P	P	A	P	P	A
DHEERAJ	P	P	A	P	P	P	A	P	P	P	A
ANJALI SARKAR	P	P	P	P	P	P	P	P	P	P	A
ABHISHEK	P	P	A	P	P	A	P	P	P	P	P
CHIRAG PATHAK	P	P	P	P	P	A	P	P	A	P	P
MAYANK SINGHANIA	P	P	P	P	P	P	P	P	P	P	P
VISHANK RANA	P	P	P	P	P	P	P	P	P	P	P
MAYANK KUMAR	P	P	P	P	P	P	P	P	A	P	P
AMIT THAKUR	P	P	P	P	A	P	P	P	P	P	P
SANDEEP KUMAR	P	P	P	P	P	P	P	P	P	P	P
HARSH TOMAR	P	P	A	P	P	P	P	P	P	A	A

Prof

Ans
COURSE INCHARGE

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)
Dean
School of Engineering & Technology
K.R. Mangalam University
Sohna Road, Gurugram



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	13-Oct-22	15-Oct-22	17-Oct-22	20-Oct-22	22-Oct-22	23-Oct-22	24-Oct-22	27-Oct-22	29-Oct-22
SAKSHI RAI	P	A	P	P	P	P	P	P	P
SHIVANI	P	P	P	P	P	P	A	P	A
RAHUL	A	P	P	A	P	P	P	P	P
SPARSH GARG	P	P	P	P	P	P	P	P	A
RITIK	P	P	P	P	P	P	A	P	A
JEETU POSWAL	P	P	P	P	A	P	P	P	P
ABHISHIK PATHAK	P	P	P	P	P	P	A	P	P
AKASH MAHATO	P	A	P	P	P	P	P	P	P
NIKHIL KUMAR	P	P	P	P	P	P	P	P	P
SIMRAN KATARIYA	P	P	P	P	P	P	P	P	P
ROHIT YADAV	P	P	A	P	P	P	P	P	P
SUKHDEV RAWAT	P	P	A	P	A	P	P	P	A
SAHIL	A	A	A	A	P	A	A	P	P
JITENDIR VATS	P	P	P	P	P	P	P	P	A
DHEERAJ	P	P	P	P	A	P	P	P	A
ANJALI SARKAR	P	P	P	P	P	P	A	P	A
ABHISHEK	P	P	P	A	A	P	P	P	P
CHIRAG PATHAK	P	P	P	P	P	P	A	P	P
MAYANK SINGHANIA	P	A	P	A	P	P	A	P	P
VISHANK RANA	P	P	P	P	P	P	P	P	P
MAYANK KUMAR	P	P	P	P	P	P	P	P	P
AMIT THAKUR	P	P	P	P	P	P	P	P	P
SANDEEP KUMAR	P	P	P	P	P	P	P	A	P
HARSH TOMAR	A	P	P	P	P	P	P	P	P

[Signature]

[Signature]
COURSE INCHARGE

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

DEAN
School of Engineering & Technology
K.R. Mangalam University
Sohna Road, Gurugram
1224102



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	31-Oct-22	1-Nov-22	5-Nov-22	7-Nov-22	10-Nov-22	12-Nov-22	14-Nov-22	17-Nov-22	19-Nov-22
SAKSHI RAI	P	P	P	P	P	P	P	P	A
SHIVANI	P	A	P	P	P	P	P	P	P
RAHUL	P	P	P	P	P	P	P	P	P
SPARSH GARG	P	P	P	A	P	P	P	P	A
RITIK	P	P	P	P	P	P	P	P	P
JEETU POSWAL	A	P	P	A	P	P	A	P	P
ABHISHEK PATHAK	P	P	P	A	P	P	A	P	P
AKASH MAHATO	A	P	P	P	P	P	P	P	P
NIKHIL KUMAR	P	P	P	P	P	P	P	P	P
SIMRAN KATARIYA	P	A	P	P	P	P	P	P	P
ROHIT YADAV	A	P	A	P	P	A	P	P	P
SUKHDEV RAWAT	P	P	P	P	P	P	P	P	P
SAHIL	P	P	P	P	P	P	P	P	P
JITENDER VATS	P	P	P	A	P	P	P	P	A
DHEERAJ	P	P	P	A	P	P	P	A	P
ANJALI SARKAR	P	P	P	P	P	P	P	P	P
ABHISHEK	A	P	P	A	P	P	A	P	P
CHIRAG PATHAK	P	P	P	P	P	P	A	P	P
MAYANK SINGHANIA	A	P	P	P	P	P	P	P	P
VISHANK RANA	P	P	P	P	P	P	P	P	P
MAYANK KUMAR	P	P	P	P	P	P	P	P	P
AMIT THAKUR	A	P	P	P	P	A	P	P	P
SANDEEP KUMAR	P	P	P	P	P	P	P	P	P
HARSH TOMAR	A	P	P	A	P	P	P	P	P

COURSE INCHARGE

Prof

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

School of Engineering & Technology
K.R. Mangalam University
Sohna road, Gurugram



ATTENDANCE SHEET
VAC COURSE FOR ACADEMIC YEAR 2022-23
COURSE CODE: VAC134
COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	21-Nov-22	24-Nov-22	26-Nov-22	28-Nov-22	1-Dec-22	3-Dec-22	5-Dec-22	8-Dec-22	10-Dec-22	12-Dec-22
SAKSHI RAI	P	P	P	P	A	P	P	P	P	P
SHIVANI	P	A	P	P	P	P	P	P	P	A
RAHUL	P	P	P	A	P	P	A	P	P	P
SPARSH GARG	P	P	A	P	P	P	P	P	P	P
RITIK	P	P	P	P	P	P	P	P	P	A
JEETU POSWAL	P	P	P	P	P	P	P	A	P	P
ABHISHEK PATHAK	A	P	P	P	P	P	P	P	P	A
AKASH MAHATO	P	P	P	P	A	P	P	P	P	P
NIKHIL KUMAR	P	P	P	P	P	P	P	P	P	P
SIMRAN KATARIYA	A	P	P	P	P	P	P	P	P	P
ROHIT YADAV	P	P	P	P	P	A	P	P	P	P
SUKHDEV RAWAT	P	A	P	P	P	A	P	A	P	P
SAHIL	P	P	P	A	A	A	A	P	A	P
JITENDER VATS	P	P	A	P	P	P	P	P	P	P
DHEERAJ	P	P	A	P	P	P	P	A	P	P
ANJALI SARKAR	P	P	A	P	P	P	P	P	P	A
ABHISHEK	P	P	P	P	P	P	A	A	P	P
CHIRAG PATHAK	A	P	P	P	P	P	P	P	P	A
MAYANK SINGHANIA	P	P	P	P	A	P	A	P	P	A
VISHANK RANA	P	P	P	P	P	P	P	P	P	P
MAYANK KUMAR	A	P	P	P	P	P	P	P	P	P
AMIT THAKUR	P	P	P	P	P	P	P	P	P	P
SANDEEP KUMAR	P	P	P	P	P	P	P	P	P	P
HARSH TOMAR	P	A	A	A	P	P	P	P	P	P

COURSE INCHARGE

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

School of Engineering & Technology
K.R. Mangalam University
Sohna road, Gurugram



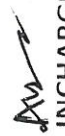
ATTENDANCE SHEET

VAC COURSE FOR ACADEMIC YEAR 2022-23

COURSE CODE: VAC134

COURSE TITLE: 3D PRINTING TECHNOLOGY

NAME	15-Dec-22	17-Dec-22	19-Dec-22	22-Dec-22	24-Dec-22	26-Dec-22	29-Dec-22	Total	Present	Percentage
SAKSHI RAI	P	P	P	P	P	P	P	51	45	88.24
SHIVANI	P	A	P	A	P	A	P	51	41	80.39
RAHUL	P	P	P	P	P	P	P	51	46	90.20
SPARSH GARG	P	A	P	P	P	A	P	51	41	80.39
RITIK	P	A	P	P	P	A	P	51	45	88.24
JEETU POSWAL	P	P	A	P	P	P	A	51	41	80.39
ABHISHEK PATHAK	P	P	P	P	P	P	P	51	42	82.35
AKASH MAHATO	P	P	A	P	P	P	A	51	45	88.24
NIKHIL KUMAR	P	P	P	P	P	P	P	51	49	96.08
SIMRAN KATARIYA	P	P	P	P	P	P	P	51	46	90.20
ROHIT YADAV	P	P	A	P	P	P	A	51	40	78.43
SUKHDEV RAWAT	P	A	P	P	P	A	P	51	41	80.39
SAHIL	P	P	P	P	P	P	P	51	39	76.47
JITENDER VATS	P	A	P	P	P	A	P	51	41	80.39
DHEERAJ	P	A	P	P	P	A	P	51	39	76.47
ANJALI SARKAR	P	A	P	P	P	A	P	51	43	84.31
ABHISHEK	P	P	A	P	P	P	A	51	39	76.47
CHIRAG PATHAK	P	P	P	P	P	P	P	51	44	86.27
MAYANK SINGHANIA	P	P	A	P	P	P	A	51	41	80.39
VISHANK RANA	P	P	P	P	P	P	P	51	48	94.12
MAYANK KUMAR	P	P	P	P	P	P	P	51	47	92.16
AMIT THAKUR	P	P	A	P	P	P	A	51	45	88.24
SANDEEP KUMAR	A	P	P	P	A	P	P	51	46	90.20
HARSH TOMAR	P	P	A	P	P	P	A	51	39	76.47


COURSE INCHARGE


Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)

DEAN
School of Engineering & Technology
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



VALUE ADDED COURSE (VAC)
ACADEMIC YEAR 2022-23
COURSE CODE: VAC134

COURSE TITLE: 3D PRINTING TECHNOLOGY
COURSE OFFERED BY: SCHOOL OF ENGINEERING AND TECHNOLOGY (SOET)
LIST OF STUDENTS COMPLETING THE COURSE

S.NO	SESSION	ROLL NO	NAME	PROGRAMM	SEMESTER	COURSE CODE	COURSE TITLE	SCHOOL
1	2022-23	2201560003	KHUSHANK BISHARYA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
2	2022-23	2201560001	LOKESH JAIN	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
3	2022-23	2009200006	DERRIC MICHAEL RAJ	B.A. (JMC)	Semester-V	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF JOURNALISM & MASS COMMUNICATION (SJMC)
4	2022-23	2201560005	DARSHIT RAGHAV	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
5	2022-23	2201560006	NANCY	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
6	2022-23	2201560007	PRATIBHA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
7	2022-23	2201560021	SWETA TEWATIA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
8	2022-23	2201560029	NISHANT	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
9	2022-23	2201560031	SWORAJ SAHOO	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
10	2022-23	2201560026	PRASHANT KUMAR MAJUMDAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
11	2022-23	2201560027	AMAN VERMA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
12	2022-23	2201560025	ISHIKA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
13	2022-23	2201560017	MANSI NEGI	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
14	2022-23	2201560008	ELEENA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
15	2022-23	2201560012	SONALI ROUT	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
16	2022-23	2201560018	JAYA TOMAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
17	2022-23	2201560023	NEHA SAINI	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
18	2022-23	2201560016	ADITYA SINGH	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
19	2022-23	2201560015	SAROJ CHOUDHARY	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
20	2022-23	2201560014	SUMIT KUMAR SHARMA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
21	2022-23	2201560024	SURAJ SAURAV	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
22	2022-23	2201560009	SAGAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
23	2022-23	2201560011	ROHAN SHARMA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
24	2022-23	2201560040	PIYUSH	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
25	2022-23	2201560043	SAKSHI	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
26	2022-23	2201560048	ANSHUL YADAV	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
27	2022-23	2201560050	ABHISHEK BISHT	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
28	2022-23	2201560051	SAKSHI RAI	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
29	2022-23	2201560046	SHIVANI	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
30	2022-23	2201560042	RAHUL	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)

[Signature]
Registrar



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

VALUE ADDED COURSE (VAC)

ACADEMIC YEAR 2022-23

COURSE CODE: VAC134

COURSE TITLE: 3D PRINTING TECHNOLOGY

COURSE OFFERED BY: SCHOOL OF ENGINEERING AND TECHNOLOGY (SOET)

LIST OF STUDENTS COMPLETING THE COURSE

S.NO	SESSION	ROLL NO	NAME	PROGRAM	SEMESTER	COURSE	COURSE TITLE	SCHOOL
31	2022-23	2201560045	SPARSH GARG	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
32	2022-23	2201560032	RITIK	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
33	2022-23	2201560044	JEETU POSWAL	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
34	2022-23	2201560041	ABHISHEK PATHAK	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
35	2022-23	2201560036	AKASH MAHATO	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
36	2022-23	2201560039	NIKHIL KUMAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
37	2022-23	2201560034	SIMRAN KATARIYA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
38	2022-23	2201560033	ROHIT YADAV	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
39	2022-23	2201560038	SUKHDEV RAWAT	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
40	2022-23	2201560035	SAHIL	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
41	2022-23	2201560037	JITENDER VATS	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
42	2022-23	2201560020	DHEERAJ	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
43	2022-23	2201560028	ANJALI SARKAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
44	2022-23	2201560047	ABHISHEK	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
45	2022-23	2201560010	CHIRAG PATHAK	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
46	2022-23	2113820020	MAYANK SINGHANIA	B.Sc. (H) Agricult	Semester-III	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF AGRICULTURAL SCIENCES (SOAS)
47	2022-23	2201560004	VISHANK RANA	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
48	2022-23	2201560019	MAYANK KUMAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
49	2022-23	2201560030	AMIT THAKUR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
50	2022-23	2201560049	SANDEEP KUMAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)
51	2022-23	2201560052	HARSH TOMAR	MCA	Semester-I	VAC134	3D PRINTING TECHNOLOGY	SCHOOL OF ENGINEERING & TECHNOLOGY (SOET)

[Signature]

Registrar

K.R. Mangalam University
Sohna Road, Gurugram (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **KHUSHANK BISHARYA**, University Enrolment No **2201560003** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahajan

Controller of Examination

JD

Register

K.R. Mangalam University
Sohna Road, Gurugram, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **LOKESH JAIN**, University Enrolment No **2201560001** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

[Signature]
K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **DERRIC MICHAEL RAJ**, University Enrolment No **20092000006** of **B.A. (JMC)** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

brahajan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **DARSHIT RAGHAV**, University Enrolment No **2201560005** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

brahajan

Controller of Examination

Registrar

K.R. Mangalam University

Sohna Road, Gurugram, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **NANCY**, University Enrolment No **2201560006** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahajan

Controller of Examination

Registrar

**K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)**



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **PRATIBHA**, University Enrolment No **2201560007** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

hahajan

Date: 20.02.2023

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SWETA TEWATIA**, University Enrolment No **2201560021** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

[Signature]

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **NISHANT**, University Enrolment No **2201560029** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SWARAJ SAHOO**, University Enrolment No **2201560031** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

hahajan

Date: 20.02.2023

Controller of Examination

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **PRASHANT KUMAR MAJUMDAR**, University Enrolment No **2201560026** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

Jmf

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ISHIKA**, University Enrolment No **2201560025** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

Jmf

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **MANSI NEGI**, University Enrolment No **2201560017** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

Jmf

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SONALI ROUT**, University Enrolment No **2201560012** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

[Signature]

Registrar
K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **JAYA TOMAR**, University Enrolment No **2201560018** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

harajan

Controller of Examination

Registrar
K.R. Mangalam University
(Haryana)
Sohna Road, Gurugram,



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **NEHA SAINI**, University Enrolment No **2201560023** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

Jed

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SARAJ CHOUBHARY**, University Enrolment No **2201560015** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahahajan

Controller of Examination

[Signature]

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SUMIT KUMAR SHARMA**, University Enrolment No **2201560014** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahajan

Controller of Examination

[Signature]
K.R. Mangalam University
Solina Road, Gurugram, India-122008



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SURAJ SAURAV**, University Enrolment No **2201560024** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

Prakashan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurgaon, Haryana (India)



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SAGAR**, University Enrolment No **2201560009** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahajan

Controller of Examination

Registrar

K R Mangalam University
Sahra Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ROHAN SHARMA**, University Enrolment No **2201560011** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahajan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SAKSHI**, University Enrolment No **2201560043** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

h. rajan

Controller of Examination

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ANSHUL YADAV**, University Enrolment No **2201560048** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

[Signature]
Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SAKSHI RAI**, University Enrolment No **2201560051** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

brahajan

Controller of Examination

[Signature]

Registrar

K.R. Mangalam University

Sohna Road, Gurugram, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SHIVANI**, University Enrolment No **2201560046** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. rajan

Controller of Examination


Regd. Secy.

K.R. Mangalam University,
Sohna Road, Mangalam, (Faridkot)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **RAHUL**, University Enrolment No **2201560042** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

Jrf

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SPARSH GARG**, University Enrolment No **2201560045** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

hahajan

Date: 20.02.2023

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **RITIK**, University Enrolment No **2201560032** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

brahajan

Controller of Examination

[Signature]

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ABHISHEK PATHAK**, University Enrolment No **2201560041** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

brahajan

Date: 20.02.2023

Controller of Examination

Jf

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **AKASH MAHATO**, University Enrolment No **2201560036** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

hahajan

Date: 20.02.2023

Controller of Examination

J.M.

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SIMRAN KATARIYA**, University Enrolment No **2201560034** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

brahajan

Date: 20.02.2023

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ROHIT YADAV**, University Enrolment No **2201560033** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

Registrar

K.R. Mangalam University

Sohna Road, Gurgaon, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SUKHDEV RAWAT**, University Enrolment No **2201560038** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

h. mahajan

Controller of Examination


Registrar
K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SAHIL**, University Enrolment No **2201560035** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

hahajan

Date: 20.02.2023

Controller of Examination

Registrar
K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **JITENDER VATS**, University Enrolment No **2201560037** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurgaon (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **DHEERAJ**, University Enrolment No **2201560020** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ANJALI SARKAR**, University Enrolment No **2201560028** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING-TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

PROFESSOR

K.R. Mangalam University
Sohna Road, Gurgaon, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **ABHISHEK**, University Enrolment No **2201560047** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hrahajan

Controller of Examination

Registrar
K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **CHIRAG PATHAK**, University Enrolment No **2201560010** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

K.R. Mangalam
Sohna Road, Gurugram, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **MAYANK SINGHANIA**, University Enrolment No **2113820020** of **B.Sc. (H) Agriculture** programme has successfully qualified **VALUE ADDED COURSE VAC134: (3D PRINTING TECHNOLOGY)** during Academic Session **2022-23 (Odd Semester)**.

Date: 20.02.2023

hahajan

Controller of Examination

[Signature]
Recd.

K.R. Mangalam

Sohna Road, Gurgaon, Haryana



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **VISHANK RANA**, University Enrolment No **2201560004** of **MCA** programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

h. mahajan

Controller of Examination

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **MAYANK KUMAR**, University Enrolment No **2201560019** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

h. mahajan

Controller of Examination

Date: 20.02.2023

h. mahajan

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **AMIT THAKUR**, University Enrolment No **2201560030** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

hrahajan

Date: 20.02.2023

Controller of Examination

Registrar
K.R. Mangalam University
Sonoo Road, Gurugram, (Haryana)



K. R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **SANDEEP KUMAR**, University Enrolment No **2201560049** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

[Signature]

Registrar

K.R. Mangalam University
Sohna Road, Gurugram, (Haryana)



K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION

CERTIFICATE OF COMPLETION

This is to certify that **HARSH TOMAR**, University Enrolment No **2201560052** of MCA programme has successfully qualified **VALUE ADDED COURSE VAC134 (3D PRINTING TECHNOLOGY)** during Academic Session 2022-23 (Odd Semester).

Date: 20.02.2023

hahajan

Controller of Examination

Jd

Registrar

K.R. Mangalam University
Sohna Road, Gurgaon, (Haryana)