



DKM COLLEGE FOR WOMEN (AUTONOMOUS) VELLORE -1
Ministry of Human Resource Development (MHRD)
& Institution Innovation Council (IIC)



REPORT ON “3D - PRINTING”

Ministry of Human Resource Development – Institution’s Innovation Cell and National Innovation and Startup Policy of D.K.M College for Women has organized a one day workshop on “3D – Printing” on 07.04.2022 from 10 A.M to 4 P.M for the students of the institution. The programme was conducted in D – Conference Hall of the college. 80 students from the various departments participated in this workshop.

INVITATION

D.K.M COLLEGE FOR WOMEN (AUTONOMOUS), VELLORE
MHRD- INSTITUTION’S INNOVATION COUNCIL (IIC)
&
NATIONAL INNOVATION AND STARTUP POLICY (NISP)
Organizes

WORKSHOP ON “3D PRINTING”
RESOURCE PERSON
Er. RAGHUL SHIVAKUMAR
DIRECTOR /SHIVPREMA INDUSTRIES Pvt. Ltd.
KANCHIPURAM

 **Date: 06.04.2022 Time : 10.00 am to 4.00 pm**  **Venue: D Block conference hall**

CHIEF PATRONS
Er. D. MANINATHAN, B.E., SECRETARY
Dr. T. SIVAKUMAR, M.A., PRESIDENT

PATRON
Dr. P. N SUDHA- PRINCIPAL

CONVENOR
Dr. A. AMIRTAHVALLI
IIC-PRESEIDENT

ORGANIZING COMMITTEE

Dr.C.Vinothini	Dr.N.Dhanam	Dr. A. Vinodhini	Mrs.R.Sarathy
Dr.V.Rekha	Dr.R.Arunadevi	Dr.M.Devi	Dr.M. Kasthuri
Dr.G.Bhavani	Dr.J.Hemapriya	Mrs.A.Kalaiselvi	Dr.C.Suganthi
Dr.K. Shoba	Mrs.J.Saranya	Dr. S.Tharani	Dr.V.Sudha

ALL ARE CORDIALLY INVITED

TITLE: 3D-PRINTING:

PROGRAMME OBJECTIVES:

- To explain current and emerging 3D printing applications in a variety of industries
- To identify opportunities to apply 3D printing technology for time and cost savings
- To know the economic implications of 3D printing including its impact on startup business and supply chain.

REPORT OF THE PROGRAMME

This programme was started with a silent prayer and Dr. A. Amithavalli, IIC President, gave the welcome address and Dr. M. Devi, Assistant Professor of Mathematics gave the brief introduction to the chief guest Er. Raghul Shivakumar, Director/Shivprema Industries Pvt.Ltd, Kanchipuram. The Resource person started the session with an interesting introduction about 3D-printing and explained the importance and uses of 3D – printing technology in education and business. He explained about 3D – Printing as follows:

3D PRINTING:

3D printing or additive manufacturing is a process of making three dimensional solid objects from a digital file. The creation of a 3D printed object is achieved using additive processes. In an additive process an object is created by laying down successive layers of material until the object is created. Each of these layers can be seen as a thinly sliced cross-section of the object. 3D printing is the opposite of subtractive manufacturing which is cutting out / hollowing out a piece of metal or plastic with for instance a milling machine. 3D printing enables you to produce complex shapes using less material than traditional manufacturing methods.

3D Software:

There are many different software tools available. From industrial grade to open source. We've created an overview on our 3D software page. We often recommend beginners to start with Tinkercad. Tinkercad is free and works in your browser, you don't have to install it on your computer. Tinkercad offers beginner lessons and has a built-in feature to export your model as a printable file e.g .STL or .OBJ. Now that you have a printable file, the next step is to prepare it for your 3D printer. This is called slicing.

Slicing: From printable file to 3D Printer:

Slicing basically means slicing up a 3D model into hundreds or thousands of layers and is done with slicing software. When your file is sliced, it's ready for your 3D printer. Feeding the file to your printer can be done via USB, SD or Wi-Fi. Your sliced file is now ready to be 3D printed layer by layer.

Benefits of 3D-Printing in Education:

- History students can print out historical artifacts to examine
- Graphic Design students can print out 3D versions of their artwork
- Geography students can print out topography, demographic, or population maps
- Chemistry students can print out 3D models of molecules
- Biology students can print out cells, viruses, organs, and other biological artifacts
- Math students can print out 3D models of problems to solve.

PHOTOS OF THE PROGRAMME



Chief Guest Introduction by Dr. M. Devi, IIC Member



Welcome Address by Dr. A. Amirthavalli, IIC-President



Chief Guest Explained about 3D-Printing





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Vellore Vallal N
Krishnaswamy
Mudaliar Senior
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Machines Used to Print 3D Object



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3D - Printing



Vote of Thanks by Dr. J. Hemapriya



Program Outcome:

The participated students had an impact on becoming self-employees in 3D-Printing and understood the importance of 3D-Printing in their career.

FEEDBACK REPORT ON 3D – PRINTING

Feedback Assessment:

78 students were given their feedback about the workshop on “3D-Printing”

Questions	Responses (Out of 78 students)			Any other
	Excellent	Good	Satisfactory	
Was the workshop well organized?	36	36	6	Students are interested to attend some more programs related to 3D-Printing in future
Relevance of the workshop theme	35	42	1	
Overall, were the speaker informative, prepared and understandable?	39	37	2	