



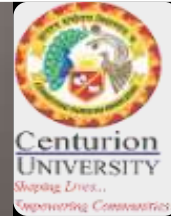
DIGITAL MANUFACTURING USING DALMIA

Year:2019

**CENTURION
UNIVERSITY**
Shaping Lives...
Empowering Communities...

This Digital Manufacturing using Dalmia webinar was organized on the year of 2019, it gives idea about software (Dalmia) as well as its uses.

Digital Manufacturing using Dalmia



Date : 14/05/2019

Centurion University of Technology and
Management



Pre-requisites: Nil
 Course Type : Audit (Workshop)
 Duration : 30 Hours

Course Objectives:

- Understand concept of reverse engineering
- Understand principles of imaging, cross-sectional scanning, digital data, computational graphics
- Understand legality of reverse engineering concept

Learning Outcomes:

- Use the Digitized Shape Editor (DSE) workbench
- Import and process the digitized data (scans or clouds of point),
- Quick Surface Reconstruction (QSR) from the digitized data
- Create a mesh and extract characteristic curves to create surfaces using point cloud data

Module	Contents	Duration
Module1	<ul style="list-style-type: none"> • Processing the Point data & Creating Tessellated Mesh • Stages in the Process, Introduction to Digitized shape editor, Importing the Point data, editing the cloud, Creating & Correcting the mesh, editing the mesh, creating tessellated mesh • Practice : 2 Cloud Point Generation • Practice : 3 Mesh Generation from Cloud Point data • Curve Creation & Processing • Stages in the Process, creating and editing scans, creating curves, Additional tools, Introduction to quick surface reconstruction, creating scans by segmentation, processing curves • Practice : 4 Curve Generation 	10 hours
Module2	<ul style="list-style-type: none"> • Creating Surface • Stages in the Process, creating surface, using automatic processes, checking deviations • Practice : 5 Surface Generation & Optimization • Additive Manufacturing • Additive Manufacturing Technology in product development- Materials for Additive Manufacturing Technology, Classification • Stereo lithography Apparatus (SLA) Principle, process, advantages- Fused Deposition Modeling- Principle, process, advantages. Selective Laser Sintering- Principle, Process, advantages, Three Dimensional Printing- Principle, process, advantages Laser Engineered Net Shaping (LENS) 	10 hours
Module3	<ul style="list-style-type: none"> • Delmia Additive Part Preparation Essentials • Preparing Infrastructure, Preparing Parts, Managing Rules, Generating the Slicing Path, • Practice : 6 Prepare a part for 3D Printing 	10 hours
TOTAL		30 hours

Anita Patra



Dr. Anita Patra, Registrar, CUTM

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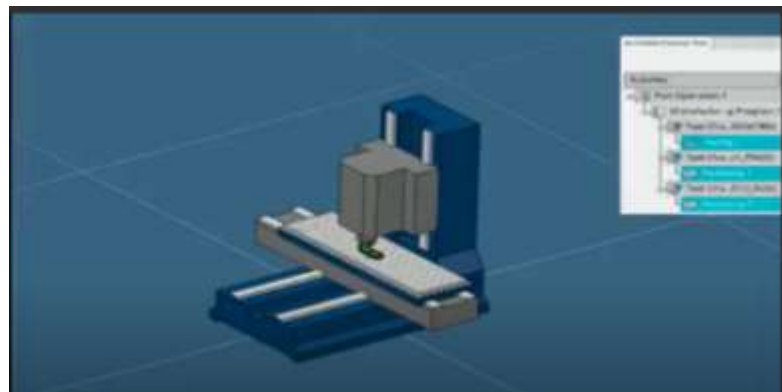
Convener



**A REPORT ON
NAME OF THE EVENT:
DIGITAL MANUFACTURING USING DELMIA
TOTAL NUMBER OF PARTICIPANTS: 60
ACADEMIC YEAR: 2018-19
DATE:14.05.2019**

The programme intended to focus on understanding the basic concept of reverse engineering. Understanding the principles of imaging, cross-sectional scanning, digital data, computational graphics were parts of deliberations of the programme. The participants were able to understand the legality of reverse engineering concept and the use of the Digitized Shape Editor (DSE) workbench.

The high-technology and automotive domains will benefit from new capabilities in variant planning and line balancing with the ability to assign processes to multiple product variants through a product variant through a product -process matrix. Line balancing capabilities are now even more flexible to support multiple product variants and to accommodate plans that assign single workers to multiple tasks, stations, or machines.



Digital Manufacturing



Demonstration on Using DELMIA on 14.05.2019

Furthermore, Import and process the digitized data (scans or clouds of points), and quick Surface Reconstruction (QSR) from the digitized data were also extensively highlighted in the programme. The participants were able to create a mesh and extract characteristic curves to create surfaces using point cloud data. The participants are able to know DELMA -work instruction composer, a power solution, delivers the capability to create and manage 3D-model -based work instruction from a configured process plan.

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Dr. Anita Patra, Registrar, CUTM

H. C. Saha



Convener



List of Participants:

Name of Event: DIGITAL MANUFACTURING USING DALMIA
Organized by: Centurion University of Technology and Management
Date: 14 May 2019

This Digital Manufacturing using Dalmia webinar was organized in the year of 2019, it gives idea about software (Dalmia) as well as its uses.

List of Participants:

S.No.	Name	Reg. No.	Presence/Absent
1	KAMAL BEHERA	170301160002	P
2	MD HAFIZUR REHMAN	170301160008	P
3	BISWAJIT MOHANTY	170301160010	P
4	DURGASANKAR MOHANTY	170301160013	P
5	SUDIPTA SUNDAR ROY	170301160016	P
6	SAHIL KUMAR PANDEY	170301160017	P
7	MANJEET SHUBHANKAR	170301160020	P
8	MD ISHA	170301160022	P
9	HARA PRASANNA ROUT	170301160026	P
10	SOMABRATA SAHU	170301160029	A
11	ASIT KUMAR SAHOO	170301160030	P
12	SUBHAM PATRA	170301160032	P
13	SUMAN KUMAR DHAL BISOI	170301160033	P
14	SOUMYA RANJAN MISHRA	170301160034	P
15	S. GYANESH PATRO	170301160035	P
16	SANTOSH SAHU	170301160037	P
17	ADITYA KAR	170301160040	P
18	GOBARDHAN MALIK	170301160041	P
19	RAKESH MOHANTY	170301160042	P
20	MOHAMMAD ASIF IBRAHIM	170301160044	P
21	RITWICK DAW	170301160045	P
22	MD.SAMIR ALI	170301160047	P
23	BHAGABAN BISWAL	170301160049	P
24	SAWAN KUMAR BISWAL	170301160050	P
25	BISWA DEB GUIN	170301160052	P
26	RAJVEER CHHOTRAY	170301160053	P
27	RAKESH SINGH	170301160054	P
28	SRIKANTA BEHERA	170301160055	A
29	BISWAJEET DAS	170301160056	P
30	AMIT KUMAR PRADHAN	170301160058	P
31	ROCKEY JENA	170301161059	P
32	SIDHARTH PANDA	170301161060	P
33	ANUNAYA KAR	170301161061	P
34	PRIYARANJAN DASH	170301161062	P

35	DEBASISH MANTRI	170301161063	P
36	MANDEEP BOSE	170301161064	P
37	ARUN ALOK MAHAKUD	170301161065	P
38	KIRAN SOREN	170301161066	P
39	SATYAJIT NANDA	170301161067	P
40	SASWAT KUMAR SWAIN	170301161068	P
41	ROHAN KUMBHAR	170301161069	A
42	ROHIT PATEL	170301161070	P
43	SURAJ SAREJENDU PAL	170301161071	P
44	BHABANI SANKAR BEHERA	170301161072	P
45	ABHISHEK PRASAD	170301161073	P
46	RAVI THAPA	170301161074	P
47	SOURAV KUMAR NAYAK	170301190003	P
48	ABHIJEET ROUT	170301190004	P
49	DEBASISH PRADHAN	170301190005	P
50	AJAYA KUMAR BARAL	170301190006	P
51	CHIRAG MOHANTY	170301190007	P
52	PRITAM NANDI	170301190010	P
53	ASHISH KUMAR JAISWAL	170301190011	P
54	SATYAJIT ROY	170301190012	P
55	TUSHAR KANTI DEY	170301190013	P
56	MOUVIK KUNDU	170301190014	P
57	KAMESH CHANDRA NAYAK	170301190015	P
58	SHUBHAM RAJ	170301190016	P
59	VISHAL KUMAR SINGH	170301190018	P
60	TAPAS KUMAR SAHOO	170301190019	P

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