



Department of Mechanical Engineering

## THREE-DAY FACULTY DEVELOPMENT PROGRAMME

**08 - 10, JULY 2021**

**10:00 AM ONWARDS**

### TECHNOLOGICAL ADVANCEMENTS IN NAVAL, DEFENSE & SPACE APPLICATIONS: AN INTEGRATED INDUSTRY 5.0 APPROACH

Model Analysis & Experimental Validation of Aerospace Applications, Engineering of Composite in Naval Applications, Control of Vibrations and under water noise for defense stealth Applications

#### CONVENOR (S)

DR. RAGHU RAM MOHAN REDDY, PROFESSOR OF MECH. ENGG.

DR. V. V. RAVI KUMAR, ASSOCIATE PROFESSOR OF MECH. ENGG.

for your information, please write to the following email ID. Last date: July 07, 2021 Registration can be done through google form available in the official website

[ravikumar.me@nsrit.edu.in](mailto:ravikumar.me@nsrit.edu.in) | +91 99943 09783 | [www.nsrit.edu.in](http://www.nsrit.edu.in)

**NADIMPALLI SATYANARAYANA RAJU  
INSTITUTE OF TECHNOLOGY**  
**AUTONOMOUS | NAAC ACCREDITED**

● **Online**

Zoom



**Dr. U. Urban  
Kumar**

Scientist, NSTL,  
Visakhapatnam



**DR. P.  
ANIL  
KUMAR**

Scientist, Research  
Centre, DRDO,  
Hyderabad



**Dr. V.  
Rama  
Krishna**

Scientist, NSTL,  
Visakhapatnam



Search mail



653 of 4,218

Compose

Inbox

548

Starred

Snoozed

Important

Sent

Drafts

Categories

Social

Updates

414

Forums

Promotions

More

Labels

Personal

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## Login credentials - FDP-TANDSA- ME-NSRIT-Reg.

Inbox x

**Dr. Naveen** <naveen.me@nsrit.edu.in>

Thu, Jul 8, 2021, 9:54 AM

to HOD, ravikumar.me, V, DIRECTOR, secretary.nsrit, PRINCIPAL, krnsrit, bcc: me

Greetings of the Day!

Dear Participants, Thank You all for registering for the THREE-DAY Faculty Development Programme on "Technological Advancements in NAVAL, DEFENSE & SPACE APPLICATIONS: AN INTEGRATED INDUSTRY 5.0 APPROACH" from 08-10, July 2021.

Here we attaching the login credentials and WhatsApp link for better communication.

Certificate of participation/ E-certificate will be provided based on the attendance of the participants only.

**Registration Link:**<https://forms.gle/8HAAi4UGAIQ17THB6>**Online mode credentials**

Zoom meeting link:

**Dates: 8th to 10th July 2021.****Time: @ 2PM to 4PM**<https://us04web.zoom.us/j/77318121118?pwd=SEhPS1RRRWswOTZLZlJXazlCcTAwUT09>

MeetingID:77318121118

Pass code: DEPTME



**Organized by**

**Department of Mechanical engineering**

**Three Days National Level Faculty Development Programme on Technological  
Advancements in Naval, Defense and Space Applications - An integrated Industry 5.0  
Approach**

**08-10<sup>th</sup> July-2021**

Department of Mechanical Engineering has conducted three days National level FDP on “Technological Advancements in Naval, Defence and Space Applications- An integrated Industry 5.0 Approach”. First day (08-07-2021), Lecture by chief guest Dr. P. Anil kumar, Scientist F & Director, Research Center, Imarat, DRDO, Hyderabad. Guest lecture on (14.00pm- 16.00pm), Modal analysis & experimental validation of Aerospace applications, Second Day (09-07-2021) Second Guest Lecture by Dr. U. Urban Kumar, Scientist ' D ' NSTL, VSKP. Guest lecture on (14.00pm – 16.00pm), Engineering of composites for navy. Third Day (10-07-2021) Third Guest Lecture by Dr. V. Rama Krishna, Scientist ' E ' NSTL, VSKP. Guest lecture on (14.00pm - 16.00pm), Control of Vibrations and under water noise for defense stealth Applications. In valedictory certificates distributed to the participants faculties from Mechanical department were participated in the workshop.



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3 of 2,649

**NO Registration FEE**  
**Registration Link:**  
<https://forms.gle/Pd0lvx7MDBk78o7o8>

Inbox 395

Starred

### Online mode credentials

## Spaces

Snoozed

**Topic: Webinar on Additive Manufacturing of Ceramic Materials**  
**Time: Sep 3, 2021 02:00 PM India**

Sent

## Drafts

1

**Join Zoom Meeting**  
<https://zoom.us/j/98475320181?pwd=ZWoyVWVWR2luZWVmeStOZlplwcjVWdzO9>

## Meet

More

Meeting ID: 984 7532 0181  
Passcode: 56YLSr

## Labels

Thanks and regards

**Dr. V. V. RAVI KUMAR, M.TECH, PH.D.**

R &amp; D COORDINATOR (INSTITUTION)

DEPARTMENT OF MECHANICAL ENGINEERING

**NS RAJU INSTITUTE OF TECHNOLOGY (Autonomous)**

Recognized as 'A' Grade by Govt. of AP

Recognized Under Section 2 (f) and 12B of the UGC Act , 1956

Accredited by NAAC with 'A' Grade (3.10/4.00)

Sontyam, Pendurthi-Anandapuram Highway,

Visaskhaptnam - 531173.

**NSRIT**



AUTONOMOUS | ACCREDITED BY NAAC WITH 'A' GRADE

**MECHANICAL ENGINEERING**



**SPEAKER**

**MR. JAI PRAKASH**

SCIENTIST - E IFCS DIRECTORATE  
AERONAUTICAL DEVELOPMENT AGENCY  
BANGALURU, KARNATAKA

**ENGINEER'S DAY**  
CELEBRATIONS

WEBINAR

**FLIGHT CONTROL  
ACTUATORS**

SEPTEMBER 15, 2021, 04:30 PM



**Recourse person's brief bio-data:**

1. Graduated from JNTU College of Engineering in Mechanical engineering
2. Holds a PGDCA in E Commerce from JNTU
3. Master of Engineering from **Indian Institute of Science**, Bangalore

Started career as Maintenance Engineer in NFCL, Kakinada, AP

Thereafter served as Jr. Works Manager in Indian Ordnance Factories. Designed and Developed several products under in-house R&D scheme for Indian Armed forces, viz. Remote control weapon stations, Armoured vehicles, Close Range Naval Gun, etc

Since 2008, have been serving in one of DRDO's autonomous bodies meant for design and development of Fighter Aircrafts, viz. Aeronautical Development Agency

**Topic:** A preliminary understanding of Flight Control Actuators and their evolution.



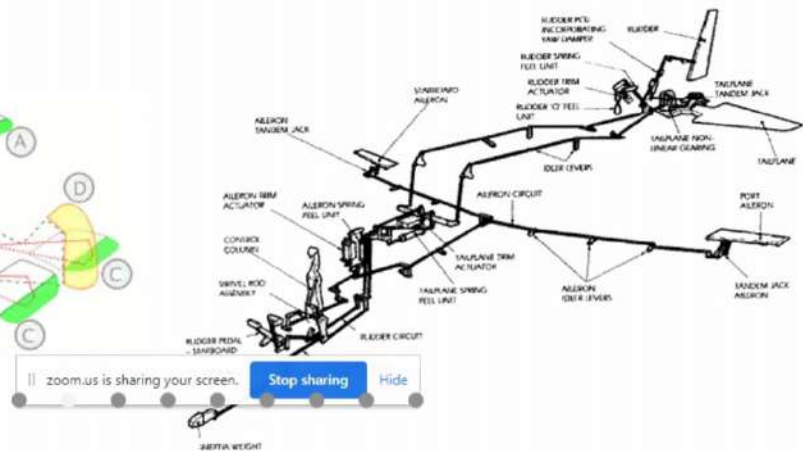
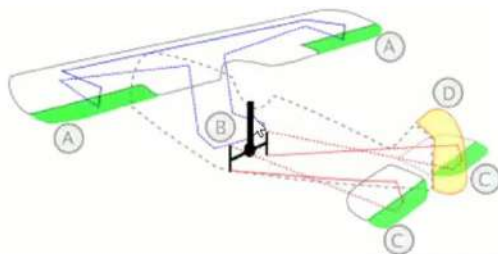
Email: [jaiprakash@jetmail.ada.gov.in](mailto:jaiprakash@jetmail.ada.gov.in)





### ☐ Push-Pull Control Rod System

- Manually operated system.
- Suitable against low aerodynamic forces.
- A combination of mechanical parts like push rods, tension cables, pulleys, counter weights, chain drives etc.
- Transmits the force applied on the cockpit control directly to the control surface.





**DEPARTMENT OF MECHANICAL ENGINEERING  
NX CAD ESSENTIALS Registered List**

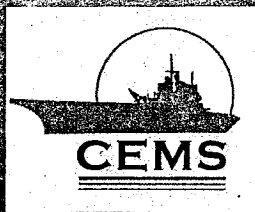
Sl.No	Roll.No	Student Name
1	20NU1A0301	AYENAMPUDI NITHIN VARMA
2	20NU1A0302	BANDARU SAGAR
3	20NU1A0303	CHANDA JAGADEESH KUMAR
4	20NU1A0304	DAKETI LEELA SAI KIRAN
5	20NU1A0305	DARA VIVEK
6	20NU1A0307	DASARI SRAVANA LAKSHMI
7	20NU1A0308	DIVYA PRAKASH KUMAR
8	20NU1A0309	DOKKARI MOHAN
9	20NU1A0310	DOPPA ROSHAN SOWRI
10	20NU1A0311	DUVVI PRANEETH VARDHAN
11	20NU1A0312	DWARAPUREDDY VEERA VENKATA SAI ABHISHEK
12	20NU1A0313	GONTHINA BHASKAR
13	20NU1A0314	GORLE JAYA KRISHNA
14	20NU1A0315	GORLE KUSHAL
15	20NU1A0316	GORRIPOTU ANIL KUMAR
16	20NU1A0317	JEERLA LIKHIN KUMAR
17	20NU1A0318	KOVELAPALLI AJAY KUMAR
18	20NU1A0319	KILARI JAGAN JEEVAN KUMAR
19	20NU1A0320	KINCHA SHYAM KRISHNA
20	20NU1A0322	KOKKERLAPATI SUDHEEP VARMA
21	20NU1A0323	KOLA VENKATA RAO
22	20NU1A0325	KORADA SAI PRASAD
23	20NU1A0326	KUTCHARLAPATI CHANDRAMOULI VARMA
24	20NU1A0327	M GEETA SAI PRASAD
25	20NU1A0328	MAJJI JOGESH
26	20NU1A0329	MASADA DIVAKAR
27	20NU1A0330	MUMMANA DINESH
28	20NU1A0331	MUNJETI YOGENDRA
29	20NU1A0332	NAKKA NAVEEN
30	20NU1A0333	NERELLA DURGA PRASAD
31	20NU1A0335	PENTAKOTA DEVI SIVA PRASAD
32	20NU1A0336	PILLA NAVEEN
33	20NU1A0337	PITLA NAVEEN
34	20NU1A0338	PONTHAPALLI YAJNESWAR
35	20NU1A0339	RAYAVARAPU SAI KIRAN
36	20NU1A0340	RANGASALA ARUNKUMAR

37	20NU1A0341	SEELA LAKSHMI CHANDRA EKANTH
38	20NU1A0342	SIMMA MOHAN KUMAR
39	20NU1A0343	SIRIPURAPU MANOJ KUMAR
40	20NU1A0344	SOURASISH TALUKDER
41	20NU1A0346	TEDLAPU LIKHITH V S G B SARAN
42	20NU1A0347	TEEGALA PRUDHVI GUPTA
43	20NU1A0348	TIRUMAREDDY RAJESH
44	20NU1A0349	VIJANAGIRI MANI VARA PRASAD
45	20NU1A0350	YALLA ROHITH
46	20NU1A0351	YANDRAPU JAGADEESH
47	20NU1A0352	YEDURU SAMPATH SAI
48	19NU1A0322	N RAJEEV LOKESH
49	19NU1A0323	PYLA RAJA
50	19NU1A0325	SARAGADAM RAJ KUMAR
51	20NU5A0325	DOGGA BALAVENKATA KISHOR
52	20NU5A0357	MIRTHIPATI SUDHEER
53	20NU5A0362	NASRAT BHANU
54	20NU5A0366	PATCHIKORA YERRI NAIDU
55	20NU5A0367	PATNANA VAMSHI
56	20NU5A0370	POLIDASU NAGARAJU
57	20NU5A0373	RAVUPALLI VISWATEJA
58	20NU5A0378	SEKHARAMAHANTI BHARATH KUMAR

**DEPARTMENT OF MECHANICAL ENGINEERING  
Mechatronics Registered List**

Sl.No	Roll.No	Student Name
1	20NU1A0301	AYENAMPUDI NITHIN VARMA
2	20NU1A0302	BANDARU SAGAR
3	20NU1A0303	CHANDA JAGADEESH KUMAR
4	20NU1A0304	DAKETI LEELA SAI KIRAN
5	20NU1A0305	DARA VIVEK
6	20NU1A0307	DASARI SRAVANA LAKSHMI
7	20NU1A0308	DIVYA PRAKASH KUMAR
8	20NU1A0309	DOKKARI MOHAN
9	20NU1A0310	DOPPA ROSHAN SOWRI
10	20NU1A0311	DUVVI PRANEETH VARDHAN
11	20NU1A0312	DWARAPUREDDY VEERA VENKATA SAI ABHISHEK
12	20NU1A0313	GONTHINA BHASKAR
13	20NU1A0315	GORLE KUSHAL
14	20NU1A0316	GORRIPOTU ANIL KUMAR
15	20NU1A0319	KILARI JAGAN JEEVAN KUMAR
16	20NU1A0320	KINCHA SHYAM KRISHNA
17	20NU1A0322	KOKKERLAPATI SUDHEEP VARMA
18	20NU1A0326	KUTCHARLAPATI CHANDRAMOULI VARMA
19	20NU1A0329	MASADA DIVAKAR
20	20NU1A0332	NAKKA NAVEEN
21	20NU1A0333	NERELLA DURGA PRASAD
22	20NU1A0334	PALAKOLLU DILLESWARA RAO
23	20NU1A0335	PENTAKOTA DEVI SIVA PRASAD
24	20NU1A0336	PILLA NAVEEN
25	20NU1A0338	PONTHAPALLI YAJNESWAR
26	20NU1A0339	RAYAVARAPU SAI KIRAN
27	20NU1A0340	RANGASALA ARUNKUMAR
28	20NU1A0341	SEELA LAKSHMI CHANDRA EKANATH
29	20NU1A0342	SIMMA MOHAN KUMAR
30	20NU1A0343	SIRIPURAPU MANOJ KUMAR
31	20NU1A0344	SOURASISH TALUKDER
32	20NU1A0346	TEDLAPU LIKHITH V S G B SARAN
33	20NU1A0347	TEEGALA PRUDHVI GUPTA
34	20NU1A0348	TIRUMAREDDY RAJESH
35	20NU1A0350	YALLA ROHITH
36	20NU1A0351	YANDRAPU JAGADEESH

37	20NU1A0352	YEDURU SAMPATH SAI
38	21NU5A0301	BAKI SANKAR RAO
39	21NU5A0302	BONELA GANESH
40	21NU5A0303	BONULA PRABHU PAVAN
41	21NU5A0304	DODDI UDAY BHASKAR
42	21NU5A0305	GANAGALLA VEERANAND
43	21NU5A0306	GANTLA ATCHUTH
44	21NU5A0307	GOLAGANI BHANU PRASAD SAI
45	21NU5A0308	GUGGILAM RAKESH
46	21NU5A0309	JAGARAPU RAKESH
47	21NU5A0310	KARRI SAI TEJA
48	21NU5A0311	KORADA VENKATESH
49	21NU5A0312	MOHAMMAD BASHEERUDDIN
50	21NU5A0313	PASANABILLI MOHAN
51	21NU5A0314	PENTAKOTA VAYUNANDA SAI KUMAR
52	21NU5A0315	PULAMARASETTI GIRIDHAR
53	21NU5A0316	SARVASUDDI LOKESH
54	21NU5A0317	SOURAV DAS



# NSRIT



**IRCLASS**  
Indian Register of Shipping

**SIEMENS**

*Ingenuity for life*



**SAGARMALA**  
PORT-LED PROSPERITY

## Centre of Excellence in Maritime and Shipbuilding (CEMS)

(A Skill Development Initiative by Govt. of India / Ministry of Ports, Shipping and Waterways / Sagarmala)

*This is to certify that Mr. /Ms. BANDARU SAGAR.....Studying  
B.Tech II Year of Mechanical Department having Roll No 20NU1A0302.....from  
Nadimpalli Satyanarayana Raju Institute of Technology (NSRIT), Vizag has successfully  
Completed One Credit Course with Industry Oriented Training on Mechatronics*

*Conducted by*

**Centre of Excellence in Maritime and Shipbuilding (CEMS), Visakhapatnam**

from 5<sup>th</sup> March 2022 to 4<sup>th</sup> June 2022

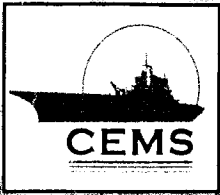
Place: Visakhapatnam

Date: 16<sup>th</sup> June 2022



Authorized Signatory

**Cdr. Gopikrishna Sivvam, IN(Retd.)**  
Chief Operating Officer-CEMS



# NSRIT



## Centre of Excellence in Maritime and Shipbuilding (CEMS)

(A Skill Development Initiative by Govt. of India / Ministry of Shipping / Sagarmala)

This is to certify that Mr /Ms.....N. RAJEEVI LOKESH.....studying  
B.Tech..IV..Semester of Mechanical Department having REGD No. 19.N.V.IA.032  
From Nadimpalli Satyanarayana Raju Institute of Technology (NSRIT), Vizag  
Has successfully completed One Credit Course with Industry Oriented Training on  
.....Essentials for NX Designers.....

Conducted by

**Centre of Excellence in Maritime and Shipbuilding (CEMS), Gandhigram,  
Visakhapatnam**

From 23/10/2021 to 18/12/2021

Certificate No:

AP/VTZ/4002/10-2021/0404

Date:

18/12/2021



**Authorized Signatory**

Cdr. Gopikrishna Sivvam, IN (Retd.)  
Chief Operating Officer-CEMS



Week	Monday	Tuesday (Online Sessions)		Wednesday	Thursday	Friday	Saturday	Sunday
Week - 1		16 <sup>th</sup> Nov 2021 Mechatronics and Robotics 1			Indian faculty (as per their flexibility) IGUS Robotics and Applications of Cobots	IES Faculty/ Online Faculty/ Lab	IESF/OF/Lab	Self Learning
Week - 2		23 <sup>rd</sup> Nov 2021 Mechatronics and Robotics 2	30 <sup>th</sup> Nov 2021 Mechatronics and Robotics 2 (Repeated Session)		Indian faculty (as per their flexibility ) Cobots and Robolink technology 1 CPRog Controller	IES Faculty/ Online Faculty/ Lab	IESF/OF/Lab	Self Learning
Week - 3		2 <sup>nd</sup> Dec 2021 Applications of Industrial Robots Tools)			Cobot's and Robolink technology 2 End-arm Tooling using IGUS robots, <u>Robot Programming</u> .	IES Faculty/ Online Faculty/ Lab	IESF/OF/Lab	Self Learning
Week - 4		7 <sup>th</sup> Dec 2021 Low Cost Automation Control of robot work by PLC fundamentals.			Indian faculty (as per their flexibility) <u>Robot Programming</u> , I/O and communication	IES Faculty/ Online Faculty/ Lab	IESF/OF/Lab	Self Learning
Week - 5		14 <sup>th</sup> Dec 2021 Low Cost Automation IGUS Robots (advanced): Sensor-controlled Robot work			Indian faculty (as per their flexibility) <u>Robot application 1:</u> Pick& Place	IES Faculty/ Online Faculty/ Lab	IESF/OF/Lab	Self Learning
Week - 6		21 <sup>st</sup> Dec 2021 Low cost Automation Applications			Indian faculty (as per their flexibility) <u>Robot Application 2:</u> Robot/Robot collaboration	IES Faculty/ Online Faculty/ Lab	IESF/OF/Lab	Self Learning

Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Week - 7		18 <sup>th</sup> Jan 2022 Introduction to PLC controls , Sensors with Automation Application 1		ARC Indian faculty / IES Faculty online PLC and Control Based application 1	IES Faculty / Online Faculty / Lab	IESF / OF / Lab	Self Learning
Week - 8		25 <sup>th</sup> Jan 2022 Introduction to PLC controls , Sensors with Automation Application 2		ARC Indian faculty / IES Faculty online PLC and Control Based application 2	IES Faculty / Online Faculty / Lab	IESF / OF / Lab	Self Learning
Week - 9		1 <sup>st</sup> Feb 2022 Industry 4.0 and its Applications -1		ARC Indian faculty / IES Faculty online PLC and Control Based application 3	IES Faculty / Online Faculty / Lab	IESF / OF / Lab	Self Learning
Week - 10		8 <sup>th</sup> Feb 2022 Industry 4.0 and its Applications -2		Task/Project implementation	IES Faculty / Online Faculty / Lab	IESF / OF / Lab	Self Learning
Week - 11		15 <sup>th</sup> Feb 2022 Digital Twin and AR and VR Applications		Task/Project implementation	IES Faculty / Online Faculty / Lab	IESF / OF / Lab	Self Learning
Week - 12		22 <sup>nd</sup> Feb 2022 Including and AR and VR Applications and Smart Manufacturing		Task/Project implementation	IES Faculty / Online Faculty / Lab	IESF / OF / Lab	Self Learning

\* The schedule for 2<sup>nd</sup> half of the program will be confirmed as per the college academic calendar.

\*All the online sessions will be conducted every Tuesday at 2 - 4 PM IST

**DEPARTMENT OF MECHANICAL ENGINEERING**  
**Applied Robotic Control Registered List**

Sl.No	Roll.No	Student Name
1	18NU1A0314	CH YESWANTH
2	18NU1A0357	SABBAVARAPU SASI PREETHAM
3	19525A0368	VANAPALLI GANESH
4	19NU5A0309	CHARAKAM VEERA DESHIK
5	19NU5A0311	DAMMU SATEESH
6	19NU5A0315	DWARAPUDI ASHOK
7	19NU5A0325	JAGARAPU LEELADHAR
8	19NU5A0326	KADIRI. TARUN TEJA
9	19NU5A0338	MAKENA VENKATA MAHESWARA PATRUDU
10	19NU5A0341	NAKKA NARENDRA YADAV
11	19NU5A0345	PEETAMBARAM RAM PRASAD
12	19NU5A0362	Y.SIVASRI NAIDU
13	18NU1A0301	ADAPA VEERA PHANENDRA SAI VARDHAN
14	18NU1A0306	BANDARU.YOGESH
15	18NU1A0316	DIYYA.HEMANTH KUMAR
16	18NU1A0319	DONA VAMSI
17	18NU1A0320	GAMPA KRUPA RAJ
18	18NU1A0327	GORAPALLI KARTHIK VARUN
19	18NU1A0328	INDALA SAMPATH
20	18NU1A0331	KANNURI SHYAM SEKHAR
21	18NU1A0339	KOTHURTHI.SRIKANTH
22	18NU1A0342	MERUGULA PRASAD
23	18NU1A0343	MUKKALA SHANKAR
24	18NU1A0344	NAMBURI.CHANDRA DEEP VARMA
25	18NU1A0360	SHAVUKARU VENKATA YASWANTH KUMAR
26	18NU1A0362	SIVARATHRI DILEEP KUMAR
27	18NU1A0366	VEDULLA SUNIL
28	18NU1A0368	VIVEK KUMAR
29	19NU5A0322	GUDLA MANIRAM
30	19NU5A0343	PAWAN GOPAL
31	19NU5A0361	V SWAMY
32	20NU5A0318	CHITTURI KARTHIK
33	20NU5A0342	KANDREGULA CHANDRA KIRAN



Cert No. ACET210515

Andhra Pradesh State Skill Development Corporation (APSSDC)  
Indo-Euro Synchronization (IES)

## *CERTIFICATE OF APPRECIATION*

This certificate is awarded to  
**Mr./Ms. Namburi Chandra Deep Varma**  
of  
Nadimpalli Satyanarayana Raju Institute of Technology  
for successfully completing the Internship in  
**Advance certification on Emerging Technologies**  
During **November 2021 - March 2022**

### Certification Partners



Indo Euro  
Synchronization  
Education and Research Resources

### Knowledge Partners:



**V.V.N Raj**

CEO

Indo Euro Synchronization

**D.V. Rama Koti Reddy**

Executive Director

APSSDC

**S. Satyanarayana**

Managing Director

APSSDC



**NADIMPALLI SATYANARAYANA RAJU  
INSTITUTE OF TECHNOLOGY  
AUTONOMOUS**



(Approved by AICTE, New Delhi II Affiliated to JNTUK, Kakinada II An ISO 9001, ISO 14001 & ISO 45001 Certified Institution)

**Recognised under Section 2 (f) & 12B of the UGC Act, 1956 II Accredited by NAAC with 'A' Grade (3.10/4.00)**

■ B.Tech ■ M.Tech ■ MBA ■ Diploma ■ [url:www.nsr.it.edu.in](http://url:www.nsr.it.edu.in) ■ Email:office@nsr.it.edu.in

**DEPARTMENT OF MECHANICAL ENGINEERING**

**REPORT ON SKILL-ORIENTED COURSE**

The Department of Mechanical Engineering introduced a skill-oriented course for B.Tech. III Semester Computer Aided Modelling **from 18-10-2021 to 05-02-2022** and B.Tech. IV Semester Computer Numerical Control Programming **from 28-02-2022 to 04-06-2022**. It was conducted as per the curriculum

**Course Outcomes - Computer Aided Modelling (20MES01):**

1. Recollect the various part designs with 2D and 3D tools.
2. Elucidate 3D tools and various assemblies with different approaches.
3. Develop automotive parts and assemblies with various sheet metal parameters and constraints.

**Course Outcomes - Computer Numerical Control Programming (20MES02):**

1. Delineate the operation sequence and route sheet for given mechanical parts.
2. Exemplify the selection criteria for CNC machines by describing principle, operation, procedural steps for different tooling.
3. Load the part program with interface software application for automatic part programming.