Mech. Engg. Dept.
Outward No. 468
Date. O. 1. 10.6. 12021.

Sardar Vallabhbhai National Institute of Technology, Surat Mechanical Engineering Department

Notice (Revised): UG Project Selection for the academic year 2021-22

Kind Attention: B. Tech. VIth Semester (Mech. Engg.)

Date: 01-06-2021

This is to inform all the B.Tech VIth Sem students that as per Reso 47.5 (Point 3) of 47th DAAC minutes, only two project groups per faculty are allowed. Hence, all the B.Tech VIth Sem students are hereby instructed to finalize the topic and supervisor for the UG Project for the upcoming semester again. The list of the titles of the proposed projects from the faculty members has been enclosed with this notice.

The students are required to form a project group (preferably 3 students per group) and need to submit the duly filled form (enclosed) for Project Selection signed by the supervisor latest by 15th June 2021 (Tuesday) to the following mail Id: office@med.svnit.ac.in

UG Project Coordinator

M.B. Maisuria

Pawan Sharma

Naresh Yarramsetty

S.

H. O. D., M. E. D., S. V. N. I. T., Surat.

Encl: 1) List of the titles of the proposed projects.

2) Form for guide selection

(To be submitted through email only to office@med.svnit.ac.in by June 15, 2021)

Date: 01/06/2021

To, The Head, Mech. Engg. Deptt., SVNIT, Surat.

I hereby confirm to guide the following group of B.Tech students for the project/dissertation work during the academic year 2021-22.

Tentative Title of the Project:

Name & Roll Number of the Students (Preferably three UG students and not more than five UG students will be allowed to work on a project)

- 1.
- 2.
- 3.

Signature:

Name of the Faculty Member:

Note:

- 1) Maximum two groups per faculty are allowed
- 2) Students need to first take the consent of faculty through e-mail. Then one student from the group need to submit the form (as email attachment) along with the consent mail received from the supervisor. (Alternately, the supervisor may directly forward his consent to office@med.svnit.ac.in)

Department of Mechanical Engineering, SVNIT Surat List of proposed project titles for UG Project Selection (2021-22)

Faculty Name	Tentative Project Topic
Dr. A. V. Doshi Dr. Bade Mukund	Analysis of Fluid Machine Project on fluid machines
Dr. Achchhelal	Progressive failure analysis of laminated composite plate with multiple cracks
Dr. A. A. Shaikh	Modeling of Foldable Robot
	2. Surface analysis of automobile component
	Design of Mechanical component using parametric modeling
Dr. Amrut Mulay	Evaluation of optimum CAM strategy in the die-less forming process.
	Multistage incremental forming investigations on Titanium and steel.
Dr. Beena Baloni	Design and Aerodynamic Analysis of Missiles
	Modeling on Tribology & Mechanical Behavior of Al MMC
Dr. B. N. Sahoo	Modeling on High Temperature Deformation Behavior of Al MMC
	1. Optimization of the week and a
	Optimization of thermal system
	Investigations on a stepped Microchannel heat sink
Dr. H. B. Mehta	3. Investigations on fluid flow analysis in the microchannel heat sink
	Optimization and designing of airless tire model for two- wheeler and comparing it with pneumatic tires
	5. Analysis and modification of BTMS

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Dr. H. K. Dave	Analysis of additive Manufacturing Process
Dr. J. Banerjee	Innovative design and analysis of wave energy harnessing mechanism
Dr. M. K. Rathod	Analysis of thermal management system for electrical vehicle Li-ion battery Thermal Performance Augmentation of commercial IC engines using Thermoelectric Generators (TEG) and heat pipes
Prof. N. G. Patel	Visualization of Gyroscope effect in 2-wheeler and 4- wheeler
Dr. Naresh Yaramsetty	Numerical Investigation of heat transfer from a PCM based heat sink Numerical Investigation of heat transfer from a PCM based heat sink Numerical Investigation of heat transfer from a PCM based heat sink Numerical Investigation of heat transfer from a PCM based heat sink
Dr. Pawan Sharma	Development of additive manufacturing process using machine learning Design and development of biomedical device using additive manufacturing Nature-inspired materials and structures using 3D printing Design and Analysis of an electric vehicle for last mile delivery service Development of smart devices using 4D printing
Dr. P. V. Bhale	In the area of Energy system Engineering
Dr. Rajesh Choudhary	Numerical Simulation of Nanofluids in Thermal System Numerical Simulation of Temperature - Controlled Air - Flow Ventilation System
Dr. Ravikant	Sustainable Lean Six Sigma



Dr. Rohit Tamrakar	Finite element analysis of dental prosthetics Automatic open and close gate design by using hydraulic system
Dr. Rohan Pande	Low Cost Protection systems for wind turbines and production of wind energy Exhaust Heat recovery of IC engines using Vapor absorption refrigeration system Numerical analysis of combustion in energy conversion system
Dr. S. Kumar	Finite element analysis of auxetic structures
Dr. T. N. Desai	A study of green manufacturing enablers to comply with environmental standards A study of significant barriers for adoption of Six Sigma quality initiative in manufacturing industries
Dr. V. D. Kalyankar	Life enhancement of industrial product through appropriate welding techniques Corrosion aspects of industrial components
Dr. Vipul M. Patel	Centrifugal Air purifier
Dr. Vimal Patel	Aeroplane Wing Design Electric Stair Climbing Trolley
Dr. Vikram Rathod	Solar thermal applications Design and analysis of horizontal axis wind turbine
Dr. Prabanshu	Solar assisted pyrolysis of sewage sludge for the conversion of waste to energy.

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	Enhancement in solar powered air conditioners through better heat transfer techniques
Dr. S. N. Pandya	Thermal simulation of friction stir additive manufacturing process.
	Design and analysis of a machine for stir processing of stir cast melt.
	Energy management in Buildings
Dr. Bade Mukund	2. Pimp as Turbines
	Applications of Fluid Mechanics and Heat Transfer for System Performance Improvement
	Tribological properties of Friction Stir Processesed Al alloy
Dr. Iveti V Manahani	2 Mechanical properties of dissimilar Al alloy welding
Dr. Jyoti V. Menghani	3 Erosion behaviour of Hardfacing alloy
	4. Influence of Heat Treatment on the Aluminum Alloys Behaviour
Dr. Sumit Khare	(1) Structural Analysis of Circular and Annular plates.
	(2) Structural Analysis of Sector plates.
Dr. Sunil Kumar	Formability Improvement of sample processed through incremental forming.
	Influence of cross route CGP process on texture and grain refinement.
Dr. Krishna Kishore M	Wire arc additive manufacturing of Al alloys
Dr. D. Srilakshmi	Damage analysis of sandwich panels using FEM
	Finite Element Analysis of composite materials using Ansys
Dr. Pallvita Yadav	2. FE Analysis of cutting tool using Ansys
	Modelling of solid particle erosion behavior in ductile material
Dr. Ram S. Yadav	Modelling of machining parameters using genetic algorithm
	2. Job scheduling using Artificial Neural Network Method.

