



SHARDA
UNIVERSITY
Beyond Boundaries



Summer Internship for Students

Hands on Training - 30 Days

A.Y. 2023-2024

ABOUT THE UNIVERSITY

Sharda University is a leading Educational institution based out of Greater Noida, Delhi NCR. A venture of the renowned Sharda Group of Institutions (SGI), The University has established itself as a high quality education provider with prime focus on holistic learning and imbuing competitive abilities in students.

ABOUT SCHOOL

Sharda School of Engineering and technology is an open platform for diverse voices where teaching runs parallel to the real world and students are groomed to join the global workforce. SSET is distinguished as one of the top-ranked engineering schools in India. The students at SSET benefit through the professional grooming of renowned faculty and industry experts having experience of tackling pressing engineering problems. Students discover their passion in one of the various offered Engineering majors at the School of Engineering and technology.

ABOUT DEPARTMENT

The department of mechanical engineering is one of the broadest and oldest in the Sharda School of Engineering and Technology, which is constantly evolving with advancements in technology, especially in Automotive Electrical Vehicles, Mechatronics, and Digital Manufacturing. The department offers B. Tech Mechanical Engineering and M. Tech Mechanical Engineering. In addition to theoretical coursework, mechanical engineering students also have access to well-equipped laboratories such as the Mechanical Simulation Laboratory, Computer-Aided Design and Drafting, Mechanical Workshop, Manufacturing Technology Laboratory, Mechanics of Machines and Solids Laboratory, Fluid Mechanics and Turbo Machinery Laboratory, Heat Transfer and RAC Laboratory, IC Engines, Automobile Engineering, and Mechatronics Engineering Laboratory, where they can gain hands-on experience in testing and evaluating mechanical systems. These laboratories include facilities for design simulation, materials testing, thermal testing, fluid mechanics, advance machining processes, automobile engineering and control systems.

OBJECTIVE OF INTERNSHIP

The Summer Training Internship Courses aim to provide extra learner-centered, graded skill-oriented instruction with the main goal of enhancing students' employability abilities.



PURPOSE OF INTERNSHIP

Internship training are relevant teaching techniques intended to fill in students' knowledge gaps and provide them an advantage in the job market. The courses are very beneficial for improving students' employability quotient by building a number of competences because of their well stated objective of Internship. It helps students start thinking creatively about a passion project. (Computers project, quantitative analytics, etc.) in addition to their career classes that provide skills that can help them turn their passion into a career. Pupils are able to comprehend the vocabulary and fundamental ideas of cloud computing in the modern IT setting. Along with services, types, and issues associated with cloud applications, students can categorize and analyze terms related to virtualization and its various forms.

COURSE DESCRIPTION

This training provides an exposure on Composite materials, Nanotechnology, Fusion 360, Micromachining, and fused deposition modeling (FDM) in engineering. An introduction to composite materials is covered at the outset of the course, along with information on their composition, manufacturing procedures, nano synthesis, CAD modeling, micro machining procedures, and 3D printing (FDM) techniques. Then, attendees will dive into the practical side of fabrication, learning about CAD modeling and printing firsthand, and building composite structures by hand layup techniques and ANSYS simulation.

RESOURCE PERSON

Dr. Ananda Babu Arumugam (Professor & HoD, Mechanical Engineering, SSET)

Research Areas: Development of Bioinspired Lightweight Sandwich Core Materials, Mechanical and Structural Behaviour of Composite Materials and Structures, Computational Mechanics for Solids.

Dr. Bhim Singh (Professor, Mechanical Engineering, SSET)

Research Areas: Statistical quality control, operations research, supply chain management, value engineering, lean manufacturing and industry 4.0.

Dr. Vineet Kumar (Associate Professor, Mechanical Engineering, SSET)

Research Areas: 3D Printing, Application of Analytical Hierarchy Process, analytic network process approach and Interpretive structural modelling

Dr. Sujoy Kumar Dey (Associate Professor, Mechanical Engineering, SSET)

Research Areas: Composite, Bio polymer, Polymer implant, Mechanical Characterizations of polymers

Dr. Paul Praveen A. (Associate Professor, Mechanical Engineering, SSET)

Research Areas: Vibration, FEM, Polymer Composites, Non-Destructive Technique



Dr. Kennedy.S (Associate Professor, Mechanical Engineering, SSET)

Research Areas: Materials Science, Nanotechnology and Mechatronics

Dr. Akanksha Mishra (Assistant Professor, Mechanical Engineering, SSET)

Research Areas: Non-Conventional Energy Storage & Nano fluids

Dr. Himashu Payal (Assistant Professor, Mechanical Engineering, SSET)

Research Areas: Non-conventional machining, Prediction and Optimization Techniques

Ms. Saigeetha (Assistant Professor, Mechanical Engineering, SSET)

Research Areas: Composite Materials, Characterization of Materials, CAD

Dr. Nitesh Kumar (Assistant Professor, Mechanical Engineering, SSET)

Research Areas: Machine Design, Composite materials, and Robotics

Mr. R. S. Ohja (Assistant Professor, Mechanical Engineering, SSET)

Research Areas: Production and Industrial management, Welding Technology

Dr. Tushar Bansal (Assistant Professor, Civil Engineering, SSET)

Research Areas: Concrete Technology, Structural Health Monitoring

Dr. Shankar Narayanan (Associate Professor, Physics, SSET)

Research Areas: Nanotechnology, Materials Science and Biophysics

Mr. Rajesh Yadav & Mr. Rounaq (Autodesk Trainers)

Research Areas: Composite Materials, Characterization of Materials, CAD

Dr. Ashok (Associate Professor, School of Engineering and Technology, VIT)

Research Areas: Automobile Engineering, E-Mobility, Internal Combustion Engines, Hybridization

Dr. Edwin Sudhagar P (Associate Professor, School of Engineering and Technology, VIT)

Research Areas: Polymer Composites, Vibration Control, FEM

Mr. Parameswaran R (Asst. Manager, LG soft India)

R&D: Mold flow Analysis, Air Solution

Dr. Lawrance (Associate Professor, Karunya Institute Technology & Sciences)

Research Areas: Tool Vibrations, Machining operations, Smart dampers

Dr. Hariharan (Project Staff, Hindustan Institute of Technology, Chennai)

Research Areas: Composites, Smart Structures, Nanotechnology



Dr. Twinkle (Assistant Professor, Amal Jyothi College of Engineering)

Research Areas: Polymer Composites, Vibration Control

Mr. Rebin Sanford (Consultant, 3D Technology Printers)

Research Areas: Additive Manufacturing, 3D Printing

Mr. Pankaj Viswakarma (Technical Assistant, Mechanical Engineering, SSET)

Skill & Expertise: Auto Care, Diesel Locomotive Working Systems

Mr. Ashok (Technical Assistant, Mechanical Engineering, SSET)

Skill & Expertise: Auto Mobile, Auto CAD, Solid works

Mr. Vijay Veer Singh (Technical Assistant, Mechanical Engineering, SSET)

Skill & Expertise: Auto CAD and Fusion 360



INTERNSHIP SCHEDULE

Date(s)	Scheduled Topics	Session Time		Faculty Name
20-05-2024	Hands on Autodesk Fusion	FN	10 AM-12:30 PM	Ms. Saigeeta
	Demonstration of Composite Materials and Practice	AN	2:00 - 4:30 PM	Prof. Ananda Babu & Dr. Paul Praveen A
21-05-2024	Hands on Autodesk Fusion	FN	10 AM-12:30 PM	Ms. Saigeeta
	Fabrication of Composite Laminate using Hand Layup Technique	AN	2:00 - 4:30 PM	Dr. Paul Praveen A
22-05-2024	Hands on Autodesk Fusion	FN	10 AM-12:30 PM	Ms. Saigeeta
	Activity based learning and practice for gaining skill set	AN	2:00 - 4:30 PM	Dr. Paul Praveen A
24-05-2024	Modeling of Machine Parts on Autodesk Fusion	FN	10 AM-12:30 PM	Mr. Rajesh Yadav & Mr. Rounaq, Autodesk, Inc.
	Introduction to MATLAB	AN	2:00 - 4:30 PM	Dr. Ananda Babu
27-05-2024	Numerical Techniques through MATLAB	FN	10 AM-12:30 PM	Dr. Sujoy Kumar Dey
	Skill based learning through practice on Mechatronics	AN	2:00 - 4:30 PM	Mr. Pankaj Vishwakarma
28-05-2024	Fused Deposition Modeling	FN	10 AM-12:30 PM	Dr. Vineet Kumar
	Nanotechnology	AN	2:00 - 4:30 PM	Dr. Akanksha Mishra
29-05-2024	Micro Machining	FN	10 AM-12:30 PM	Dr. Himanshu Payal
	Application of Piezoelectric sensor in SHM	AN	2:00 - 4:30 PM	Dr. Tushar Bansal & Dr. Paul Praveen A
30-05-2024	Solving Vibration Analysis Problems using MATLAB	FN	10 AM-12:30 PM	Dr. Ananda Babu
	Vibration Simulation using ANSYS and MATLAB	AN	2:00 - 4:30 PM	
31-05-2024	Computational Method	FN	10 AM-12:30 PM	Dr. Ananda Babu
		AN	2:00 - 4:30 PM	
01-06-2024	Air Solution R&D	FN	10 AM-12:30 PM	Mr. Parameswaran R. Asst. Manager, LG soft India
	Transition Barrier Towards Industry 4.0 and Industry 5.0 in India	AN	2:00 - 4:30 PM	Prof. Bhim Singh
03-06-2024	Green Synthesis of Carbon Dots and Characterizations Techniques	FN	10 AM-12:30 PM	Dr. Shankar Narayanan S
	Introduction to welding with Demonstration	AN	2:00 - 4:30 PM	Mr. R. S. Ohja



04-06-2024	Numerical Techniques through MATLAB	FN	10 AM-12:30 PM	Dr. Sujoy Kumar Dey
	Introduction to Robotics	AN	2:00 - 4:30 PM	Dr. Nitesh Kumar
05-06-2024	Transition Barrier Towards Electric Mobility in India an Overview of Electric Powertrain System	FN	10 AM-12:30 PM	Dr. Ashok B, Associate Professor, School of Engineering and Technology, VIT
	Microelectromechanical Systems (MEMS)	AN	2:00 - 4:30 PM	Dr. Kennedy S.
06-06-2024	Training on Solid Mechanics	FN	10 AM-12:30 PM	Mr. Pankaj Viswakarma & Mr. Vijayveer Singh
	Practice on Mechanics of Machines	AN	2:00 - 4:30 PM	
07-06-2024	Activity based learning on office tools for Project works	FN	10 AM-12:30 PM	Mr. Vijayveer Singh
	Secure User Interfacing & Data protection	AN	2:00 - 4:30 PM	
10-06-2024	Hands on training on CNC	FN	10 AM-12:30 PM	Mr. Ashok Kumar
		AN	2:00 - 4:30 PM	
11-06-2024	Hands on practice on EDM	FN	10 AM-12:30 PM	Mr. Ashok Kumar
		AN	2:00 - 4:30 PM	
12-06-2024	Selection of ASTM standards and Sample preparation for testing	FN	10 AM-12:30 PM	Dr. Paul Praveen A
		AN	2:00 - 4:30 PM	
13-06-2024	Material and Mechanical Characterization on samples	FN	10 AM-12:30 PM	Dr. Paul Praveen A
		AN	2:00 - 4:30 PM	
14-06-2024	Polymer Composite Joints	FN	10 AM-12:30 PM	Dr. Edwin Sudhagar, VIT University
		AN	2:00 - 4:30 PM	
15-06-2024	Opportunities for Mechanical Engineers	FN	10 AM-12:30 PM	Resource Person: Sharda Alumni
	Practice on Operating Systems & Chat GPT	AN	2:00 - 4:30 PM	Mr. Vijayveer Singh
18-06-2024	Techniques on Additive Manufacturing (3D Printing)	FN	10 AM-12:30 PM	Mr. Rebin Sanford, Additive 3D Printers
	Hands on Practice on ANSYS and Future Scope	AN	2:00 - 4:30 PM	Dr. Hariharan, Hindustan Institute of Technology, Chennai
19-06-2024	Tool Vibration Control	FN	10 AM-12:30 PM	Dr. Lawrance, Karunya University
	Digital Transformation in Mechanical Design and Engineering	AN	2:00 - 4:30 PM	Dr. Twinkle, Amal Jyothi College of Engineering

EVENT DETAILS FORMAT FOR WHATSHAPPENING& EVENT CALENDAR (Ver. 2.0)

Names of the Event	Hands on In-house training on “Summer Internship for Students”.									
About the Event (Brief description)	The Department of Mechanical Engineering, Sharda School of Engineering & Technology (SSET) is organizing a hands on In-house training on “ Summer Internship for Students ” from 20 th May 2024 to 19 th June 2024									
Objective of the Event	The Summer Training Internship Courses aim to provide extra learner-centered, graded skill-oriented instruction with the main goal of enhancing students' employability abilities.									
Scope of the Event (Beneficiary) (Write ‘Y’ for Yes and ‘N’ for No)	Student	Y	Faculty	N	Staff	Y	Society/Community			N
Target Audiences>> (For Event details Circulation) (Write ‘Y’ for Yes and ‘N’ for No)	Faculty/Staff	N	UG Group	Y	PG Group	N	Batch 2023-2024	N	Batch 2022-23	N
	Batch 2022-2023	N	Batch 2023-24	Y	Ph. D Scholars	N	Dr. Group			N
Name of the Organizing Department/ School	Department				School					
	Mechanical Engineering				Sharda School of Engineering and Technology					
Convener details	Name				Contact		EmailID			
	Prof. (Dr.) Shankar Ramamoorthy				9910273899		shankar.ramamoorthy@sharda.ac.in			
Co-convener details	Prof. Ananda Babu Arumugam				9910520613		ananda.babu@sharda.ac.in			
Coordinator details	Dr. Paul Praveen A				9345777727		a.praveen@sharda.ac.in			
Chief Guest/Guest of Honor	Name				Affiliation					
	NA				NA					
Speaker details	Name of the Speaker				Affiliation		AREA [Academics/ Industry/Research Organization/ Others			
Speaker -1	Ms. Saigeeta Assistant Professor, ME				SSET, Sharda University		Academics / Industry			
Speaker -2	Prof. Ananda Babu Professor & HoD, ME				SSET, Sharda University		Academics / Research organization			
Speaker -3	Dr. Paul Praveen A Associate Professor, ME				SSET, Sharda University		Academics / Research organization			
Speaker -4	Mr. Rajesh Yadav & Mr. Rounaq				Autodesk, Inc.,		Academics / Industry			
Speaker -5	Dr. Sujoy Kumar Dey Associate Professor, ME				SSET, Sharda University		Academics / Research organization			

EVENT DETAILS FORMAT FOR WHATSHAPPENING& EVENT CALENDAR (Ver. 2.0)

Speaker -6	Mr. Pankaj Vishwakarma Technical Assistant	SSET, Sharda University	Academics / Research organization
Speaker -7	Dr. Vineet Kumar Associate Professor, ME	SSET, Sharda University	Academics / Research organization
Speaker -8	Dr. Akanksha Mishra Assistant Professor, ME	SSET, Sharda University	Academics / Research organization
Speaker -9	Dr. Himanshu Payal Assistant Professor, ME	SSET, Sharda University	Academics / Research organization
Speaker -10	Dr. Tushar Bansal Assistant Professor, Civil	SSET, Sharda University	Academics / Research organization
Speaker -11	Mr. Parameswaran R, Asst. Manager	R&D, LG Soft India	Industry
Speaker -12	Prof. Bhim Singh Professor	SSET, Sharda University	Academics / Research organization
Speaker -13	Dr. Shankar Narayanan S Associate Professor, Physics	SSET, Sharda University	Academics / Research organization
Speaker -14	Mr. R. S. Ohja Assistant Professor, ME	SSET, Sharda University	Academics / Research organization
Speaker -15	Dr. Nitesh Kumar Assistant Professor, ME	SSET, Sharda University	Academics / Research organization
Speaker -16	Dr. Ashok B, Associate Professor	VIT, Vellore	Academics / Research organization
Speaker -17	Dr. Kennedy S. Associate Professor, ME	SSET, Sharda University	Academics / Research organization
Speaker -18	Mr. Vijayveer Singh Technical Assistant	SSET, Sharda University	Academics / Research organization
Speaker -19	Mr. Ashok Kumar Technical Assistant	SSET, Sharda University	Academics / Research organization
Speaker -20	Dr. Edwin Sudhagar, Associate Professor,	VIT, Vellore	Academics / Research organization
Speaker -21	Resource Person	Sharda Alumni	Industry
Speaker -22	Mr. Rebin Sanford Design Engineering	Additive Technologies	Industry
Speaker -23	Dr. Hariharan Project Staff Mechanical Engineering	Hindustan Institute of Technology	Academics / Research organization
Speaker -24	Dr. Lawrance Associate Professor Mechanical Engineering	Karunya Institute of Technology	Academics / Research organization
Speaker -25	Dr. Twinkle Assistant Professor Mechanical Engineering	Amal Jyothi College of Engineering	Academics
Date of the Event (Start Date)	DD	MM	YYYY
	20	05	2024
Date of the Event(End Date)	19	06	2024

EVENT DETAILS FORMAT FOR WHATSHAPPENING& EVENT CALENDAR (Ver. 2.0)

Duration of the Event (No. of Days)	30 Days									
Timings of the Event	10AM – 12:30 PM & 2:00 PM to 4:30 PM									
Venue of the Event	Offline									
Proposed Budget of the Event	Nil									
Type of the Event>>	(Write ‘Yes’ where applicable in the respective event column)									
	Conference	Seminar	Training (In-house)	Symposium	Guest Lecture (Invited talk)	FDP/M DP/EDP	Special Session		Industrial Visit	Extension and Outreach programs
			YES							
National			YES							
International										
Name of the Collaborative Organization (i.e.Industry,Non- GovernmentOrganizationsthrough NSS/NCC/Redcross/YR)	Autodesk, Inc., LG Soft India, Vellore Institute of Technology (VIT), Karunya Institute of Technology & Sciences, Amal Jyothi College of Engineering, and Hindustan Institute of Technology									
Name of the Community Person (Only applicable for Extension and Outreach programs)										
Expected Number of Participants	Inter School	15								
	Intra School	NA								
	External	NA								