

Siemens Centre of Excellence National Institute of Technology Kurukshetra

The Siemens Centre of Excellence, NIT Kurukshetra offers One Semester Internship/Project Work to the students of **National Institute of Technology Kurukshetra**.

Eligibility: B. Tech. 3rd year, 6th Semester
Programmes of Study: Mech./PIE/Elect. /ECE/Comp. Engg. /IT/Civil Engg

Period of Internship: 11 January 2021 to 28 May 2021

Payment (Fee and O&M Charges):

- i. Internship / Project Work Fee (GST @18% inclusive) : Rs. 45,000/-
- ii. O&M Charges (GST @ 18% inclusive) : Rs. 2,000/-

Note:

There is 100% fee waiver for the students of NIT Kurukshetra. However, they are required to pay only O&M charges of Rs. 2,000/-.

Payment to be made in favor of the following beneficiary:

Beneficiary: Director, National Institute of Technology Kurukshetra (SCoE)

Account No. 39767311121

Nature of account: Savings Bank Account

IFSC: SBIN0006260

Bank Name & Branch: State Bank of India, NIT Kurukshetra

Branch Code: 6260

List of projects(Tentative): Attached

All the interested students are hereby notified to contact their respective department (Head/faculty coordinator for Internship) for pursuing the internship in the SCoE.

The applications through concerned department should reach the SCoE latest by 25.12.2020.

Head, SCoE

NIT Kurukshetra

Siemens Centre of Excellence (SCoE)
National Institute of Technology Kurukshetra

Dated: 15.12.2020

Subject: The **One-Semester** Internship/Project in the SCoE for the students of B. Tech. 3rd Year, VI Semester of NIT Kurukshetra for the *academic session 2020-2021*.

Duration: 11 January 2021 to 28 May 2021

List of the Department-wise proposed Internship Projects

S.No	Internship Project Title	Department-wise seats				Domain
		ME / PIE	EE	ECE/ Comp. /IT	CE	
1	Designing, simulating the process of shoe manufacturing industry by using Siemens Tecnomatix Plant Simulation software	4				Advance Manufacturing
2	Designing, simulating the process of Food processing (e.g. potato chips) manufacturing industry by using Siemens Tecnomatix Plant Simulation software	4				Advance Manufacturing
3	Designing, simulating the process of sim card manufacturing industry by using Siemens Tecnomatix plant simulation software	4				Advance Manufacturing
4	Designing, simulating the process of Paper manufacturing industry by using Siemens Tecnomatix Plant Simulation software	4				Advance Manufacturing
5	Designing, simulating the process of Air conditioner manufacturing industry by using Siemens Tecnomatix Plant Simulation software	4				Advance Manufacturing
6	Designing, simulating the process of watch manufacturing industry by using Siemens Tecnomatix plant simulation software	4				Advance Manufacturing
7	Designing, simulating the process of Automobile part/accessories (2 wheelers) manufacturing industry by using Siemens Tecnomatix plant simulation software	4				Advance Manufacturing
8	Designing, simulating the process of textile manufacturing industry by using Siemens Tecnomatix Plant Simulation software	4				Advance Manufacturing
9	Designing, simulating the process of Automobile part/accessories (4 wheelers) manufacturing industry by using Siemens Tecnomatix Plant Simulation software	4				Advance Manufacturing
10	Bottling plant using recipe, monitored, controlled by HMI/SCADA.			4		Automation
11	PLC based tank filling system			4		Automation
12	PLC based man less railway gate crossing			4		Automation
13	Moisture controlled Automated Irrigation system.			4		Automation
14	PLC based automatic Dam shutter control system.			4		Automation
15	PLC based Multi-Channel, Smart Fire Detection, Alarm System.			4		Automation
16	PLC based traffic, street light controlling system			4		Automation

17	Tool Path Programming for Fabrication of Crankshaft, Connecting Rod.	4				CNC Controller
18	Tool Path Generation, Simulation of Industrial Turning Operations.	4				CNC Controller
19	Tool Path Generation, Simulation of Industrial Milling Operations.	4				CNC Controller
20	Manufacturing model of cannon	4				CNC Machine
21	Manufacturing lever press model used for fitting in industrial operation	4				CNC Machine
22	Design & Manufacturing metal Chess piece using CNC	4				CNC Machine
23	Quality inspection of Lever press assembly parts.	4				CNC Machine
24	Design of Outer body of Supersonic Aircraft	4				Design & Validation
25	Modeling of steering system & braking system for four wheeler	4				Design & Validation
26	Design of Hydraulic jack for lifting automobile	4				Design & Validation
27	Die face design	4				Design & Validation
28	Mold wizard for injection molding-tool design	4				Design & Validation
29	Progressive die wizard for sheet metal components-tool design	4				Design & Validation
30	Modeling of domestic wind mill, its blade optimization	4				Design & Validation
31	Modeling of the automobile engine, its optimization.	4				Design & Validation
32	100 KVA Transformer Design in NX CAD		4			Design & Validation
33	Induction Motor Design in NX CAD		4			Design & Validation
34	DC Motor Design in NX CAD		4			Design & Validation
35	Contactore Design in NX CAD		4			Design & Validation
36	Energy Saving Kit Design in NX CAD		4			Design & Validation
37	MCCB Design in NX CAD		4			Design & Validation
38	Elevator Design in NX		4			Design & Validation
39	Automation Integration with Drive		4			Electrical Energy Saving
40	CNC Controller with Drive		4			Electrical Energy Saving
41	Designing of Converter at Manufacturing Plant Using SIMOCODE		4			Electrical Energy Saving
42	Controlling of Conveyor Using AC & DC Drive		4			Electrical Energy Saving
43	Electrical Load Analysis & Energy Saving for Industries		4			Electrical Energy Saving

44	Design of Starter for Industrial Application Using SIMOCODE		4			Electrical Energy Saving
45	Controlling Industrial Robotics Arm using Drive		4			Electrical Energy Saving
46	Develop ladder logic, simulate the product sorting station along with HMI, SCADA			6		Mechatronics
47	Automatic product inspection system, Monitored, controlled by HMI/SCADA.			6		Mechatronics
48	Maintenance, troubleshooting of feeder, inspection station	4				Mechatronics
49	Descriptive Analysis of feeder, Inspection station	4				Mechatronics
50	3D scanning of machine component/ Automobile component. (collection of STL file)	4				Metrology
51	Quality inspection, study of Statistical Process Control (SPC) of automobile components.	4				Metrology
52	Gear Measurement by using CMM machine. (Spur gear, helical gear only.)	4				Metrology
53	Quality Inspection of Automobile parts using CMM machine.	4				Metrology
54	PCS based D.C motor Speed monitoring system		4	4		Process Instrumentation
55	Parameterisation, characteristics analysis of different types of RTDs, TCs.			4		Process Instrumentation
56	Identification, sorting of different liquids, their levels in the beverages industry.			4		Process Instrumentation
57	Robotic TIG welding operation on boiler pressure vessel piping (Heavy Engineering Industry)	6				Robotics
58	Robotic MIG welding operation on automobile chassis (Automobile Industry)	6				Robotics
59	SPOT Welding robot operation for four-wheeler front grill using Robot. (Automotive Industry)	6				Robotics
60	Using robotic arm for factory automation process. (Manufacturing, Packaging Industry)			6		Robotics
61	Estimation of heat distribution on wheel tread surface, hub during braking of wheel in railways	4				Test & Optimization
62	Estimation of crack growth in a rail-wheel under the effect of thermal, mechanical loading	4				Test & Optimization
63	To reduce the weight of the conventional wagons in Indian Railways with the use of Composites.	4				Test & Optimization
64	Estimation of contact characteristics on rail due to rail-wheel contact.				8	Test & Optimization
65	Estimation of fatigue life of railway wheels.				8	Test & Optimization
Total Number of Seats		150	60	58	16	

Head
SCOE, NIT Kurukshetra