

Industry Attachment Programme (IAP)
(2-4-12 model)

“Industry Attachment Programme (IAP)” has been evolved to make the Mechanical Engineering student’s role ready at the time of their graduation. Generally, students undergo an internship programme during their final semester, which it is felt will not be adequate to imbibe industry expectations to make a meaningful impact on the student. Keeping this in mind, a programme called “Industry Attachment Programme”, has been established where students will undergo internship from their second year onwards.

The programme envisages a select batch of students to undergo one week training during winter vacation of II, III and IV years in selected industry and an internship for 2 weeks, 4 weeks and 12 weeks during their summer vacation of II, III and IV year respectively, with the same industry. This arrangement facilitates the students to understand the nitty-gritty of the industry operations thoroughly as well as the industry to have a critical appraisal of the student for possible employment.

Besides the students, a faculty member is also deputed along with the students to learn the industry practices and upgrade their skills to develop into effective teachers.

Basic Training schedule:

Types of Training	Duration	Batch	Year	Total No. of Students
Training Module-I	5 days	Between 3 rd & 4 th sem – winter vacation	II year	6 or more
Internship-I	2 weeks	Between 4 th & 5 th sem – summer vacation	II year	
Training Module-II	5 days	Between 5 th & 6 th sem – winter vacation	III year	
Internship-II & project identification	4 weeks	Between 6 th & 7 th sem – summer vacation	III Year	
Training Module-III	5 days	Between 7 th & 8 th sem – winter vacation	IV Year	
Internship-III & Project submission	12 weeks	During 8 th sem	IV year	

Sakthi Auto Component Limited (SACL) Training Schedule in various sub Industries:

<p align="center">MCET Students - Industry Attachment Program (I A P) with Sakthi Auto Components Limited : Training Module-I</p>							
S. No	Training Topic	Training mode	Contents	Duration	Time	Faculty	Venue
<u>Day 1</u>							
1	Company Introduction	Class room	SACL Overview presentation	45 Minutes	9.30 am to 10.15 am	Mr.N. Kandasamy	DISA Conference Hall
2	Safety Procedures	Class room	Industrial safety	2 Hrs 45 Min	10.15 am to 01.00 pm	Mr. V.P. Thangavel	DISA Conference Hall
			Road safety				
			Personal safety				
			Fire Safety				
			Electrical safety				
Importance of PPE							
3	Plant visit		Visit to all Manufacturing Process	3 Hours	02.00 pm to 05.00 pm	Mr.N. Kandasamy & Team	Plant visit
<u>Day 2</u>							
4	CSR	Class room	Customer specific requirements	1 Hour	9.30 am to 10.30 am	Mr.N. Kandasamy / Mr.K. Karthikeyan	DISA Conference Hall
5	Drawing study		Study and analysis of product drawing	1 Hour	10.30 am to 11.30	Mr.N. Kandasamy / Mr.K.	

					am	Dharmaraja	
6	Raw Material		Specification fixation	1 Hrs 30 Min	11.30 am to 01.00 pm	Mr.N. Kandasamy / Mr. A. Ramesh	
			Preparation of Raw material spec sheet				
			Testing Methods & Approval Process				
7	Plant visit		Visit to raw Material testing & inspection	3 Hours	02.00 pm to 05.00 pm	Mr.N. Kandasamy & Team	Plant visit
<u>Day 3</u>							
8	Melting Process	Class room	Types of Melting furnace	1 Hour	9.30 am to 10.30 am	Mr.N. Kandasamy / Mr. K. Kumaravel	
			Charging of raw materials				
			Composition control & Tapping				
9	Metallurgy Lab	Class room	Microstructure analysis	1 Hour	10.30 am to 11.30 am	Mr.N. Kandasamy / Mr. P. Ravi	DISA Conference Hall
			Mechanical properties				
			Defect analysis				
10	Process control	Class room	Chemical composition control	1 Hrs 30 Min	11.30 am to 01.00 pm	Mr.N. Kandasamy / Mr. K. Kumaravel	
			Mg treatment				
			Pouring, Inoculation				
			Final Composition				
11	Plant visit		Visit to melting shop and Metallurgy Lab	3 Hours	02.00 pm to 05.00 pm	Mr.N. Kandasamy & Team	Plant visit
<u>Day 4</u>							
12	Sand Process	Class room	Sand mixture	1 Hour	9.30 am to 10.30 am	Mr.N. Kandasamy / Mr. K. Kumaravel	DISA Conference Hall
			Sand preparation				

			Sand testing				
			Sand conveying				
13	Core making	Class room	Types of core making	1 Hour	10.30 am to 11.30 am	Mr.N. Kandasamy / Mr. Suganathan	
			Manufacturing of core dies				
			Core processing				
			Core handling				
14	Moulding process	Class room	Types of Moulding machines	1 Hrs 30 Min	11.30 am to 01.00 pm	Mr.N. Kandasamy / Mr. M. Kanagaraj /Mr. Sathish	DISA Conference Hall
			Moulding machine operation				
			Moulding process				
			Mould quality				
15	Plant visit		Visit to sand plant, core shop & moulding shop	3 Hours	02.00 pm to 05.00 pm	Mr.N. Kandasamy & Team	Shop floor
<u>Day 5</u>							
16	Tooling & Methods	Class room	Understanding the industrial drawing	1 Hour	9.30 am to 10.30 am	Mr.N. Kandasamy / Mr. K. Dharmaraja	DISA Conference Hall
			Generation of 3D model and casting model				
			Generation of pattern model and core design				
			Gating simulation				
			Pattern manufacturing				
			Pattern proving				
17	Fettling & Inspection	Class room	Degating	1 Hour	10.30 am to 11.30 am	Mr.N. Kandasamy / Mr. N. Haridasan / Mr. A.K. Senthilkumar	
			Shot blasting				
			Grinding/ rough boring				
			Visual inspection				

			Hardness, X-ray, MPI, Ultrasonic testing (UT)				
18	Rejection analysis & Corrective action	Class room	Types of defects	30 Minutes	11.30 am to 12.00 pm	Mr.N. Kandasamy / Mr. K. Kumaravel	
			Analysis of defects				
			Corrective action				
19	Painting process	Class room	Phosphating	1 Hour	12.00 pm to 01.00 pm	Mr.N. Kandasamy / Mr. N. Thirumoorthy	
			Dip painting, spray painting				
			Powder coating				
			Geomet coating, ED Coating				
20	Plant visit		Visit to Tooling & Methods, Fettling & Inspection, painting process	3 Hours	02.00 pm to 05.00 pm	Mr.N. Kandasamy & Team	Shop floor
LUNCH TIME 01 PM to 2 PM							

SACL Training Details

S.N	Name of the Industry	Total No. of Students	Accompany Staff Name	Duration of the Training	Academic Year
01	Sakthi Auto components Private Limited, Perundurai, Erode.	15	Mr.N.Santhosh AP/Mech	5.12.16 To 9.12.16	2016-2017

