



Kalyanii Charitable Trust's

## LATE G. N. SAPKAL COLLEGE OF ENGINEERING

(Accredited with Grade 'B' by NAAC)

- Affiliated to > Savitribai Phule Pune University (ID. No. PU/NA/Engg./152/2009 Ref.No.-CA/6501 Dated- 18/11/2009)  
Approved by > A.I.C.T.E., New Delhi (F.N: 06/07/MS-Engg/2008/O-17, Dated- 11th June 2009)  
> Govt. of Maharashtra (No. GEC-2009/(67/09)/T.E.- 4, Dated- 15th June 2009)  
> D.T.E., M.S., Mumbai (No.2/NGC/Engg./Approval/2009/535, Dated - 23rd July 2009)  
> AISHE CODE : C-42196



Dr. Ravindra G. Sapkal  
Chairman & Managing Director  
Kalyanii Charitable Trust

Dr. Sahebrao B. Bagal  
M.E. (E & TC), Ph.D. (E & TC)  
Principal

Ref: KCT's/LGNSCOE/2021-22/267 (A)

Date: 10/01/2022

### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MoU") is made on 10<sup>th</sup> January, 2022.

Between

Department of Mechanical Engineering,  
Late Gambhirrao Natuba Sapkal College of Engineering, (LGNSCOE),  
Anjaneri, Trimbakeshwar Road, Nashik.

And

M/s Jadhav Casting  
D/1, D-1/25, MIDC Ambad, Nashik,  
Maharashtra 422010.

(LGNSCOE and Jadhav Casting are herein after individually referred to as "Party" and collectively referred to as "Parties")

#### Terms and Conditions:

##### 1. Duration

This MoU shall be valid for **Two (02) years** from 10<sup>th</sup> January 2022 and thereafter it may be renewed on mutually agreed terms.

##### 2. Purpose

This MOU is for collaboration between the parties for mutual benefit where Jadhav Casting (Industry) to provide

- Industrial visit for faculties and students.
- Industrial training/workshop for students and staff.
- Experts for Guest lecturers as per the expertise available in industry.
- Sponsorship for industrial project, Internships and mentoring for interviews of Final year students.
- Assistance for developing project ideas for students of LGNSCOE.
- Technical guidance for lab developments in LGNSCOE, Nasik.



- **CAMPUS** : Sapkal Knowledge Hub, Kalyanii Hills, Anjaneri-Wadholi, Trimbakeshwar Road, Nashik - 422 213. (India)  
Tel.: + 91- 2594 - 220168/69/70 | Mob.: +91 9922252699 | Toll Free No.: 1800 233 2999 | **E-mail** : gns\_engineering@sapkalknowledgehub.org
- **CORPORATE OFFICE** : Sapkal Knowledge Hub, 'Parag' 46, Ashwin Sector, Opp. Hotel Sai Palace, Mumbai-Agra Highway, Nashik - 422 009.  
Tel.: +91 - 253 - 2392450 / 51 | **E-mail** : head.marketing@sapkalknowledgehub.org | **Website** : www.sapkalknowledgehub.org
- **MUMBAI OFFICE** : Sapkal Knowledge Hub, Unit No. 22, 1<sup>st</sup> Floor, Shubhada Tower Shopping Centre, Sir Pochkhanwala Road, Near R.T.O. Office, Worli, Mumbai - 400 030. Tel.: + 91 - 22 - 24938914 / 15 | **E-mail** : cmd@sapkalknowledgehub.org, ravi.sapkal@gmail.com

- Platform for planning and utilizing resources like staff and infrastructure for joint R&D work.
- Sponsoring the events activities being conducted at LGNSCOE, Nasik.
- Training on special topics supported by donating outdated machinery, equipment, cut-sections, charts etc.

**3. Late Gambhirrao Natuba Sapkal College of Engineering and Industry Standard of Performance:**

LGNSCOE shall expend reasonable efforts as follows:

- LGNSCOE shall provide training, lab visit permissions in such areas as may be mutually agreed between the parties, more particularly described in this agreement.
- LGNSCOE shall provide experts for the conduct of training at the LGNSCOE campus and or at the Industry premises.
- LGNSCOE shall provide certificates/completion letter to all students who have successfully completed the training, projects conducted at LGNSCOE or at the Industry premises.

**4. Mutual Obligations:**

- Both the parties shall appoint one person as one point of contact for smooth execution of the MOU.
- This collaboration shall not be exclusive to both parties and shall not disallow each party from having similar collaboration with others. Except as expressly stated in this MOU, there shall be no obligation on any party to compensate the other in any manner or to make any claim.
- Each party shall respect the other's intellectual property.
- Nothing contained in this MoU shall be construed as resulting in the creation of a relationship of both Parties of LGNSCOE and Management of Industry. LGNSCOE and Industry are not authorized to make any representation, contract, or commitment on behalf of Industry / LGNSCOE without the prior written consent of other party.

**5. Limitation and Warranties:**

- Each party shall ensure that the other is not put to any liability for any act of the respective party under this MoU.
- Each party represents that they have full power and authority to enter into this MOU in general.



**6. Commercials:**

- LGNSCOE & Industry will design programs on mutual understanding and decide fees if any to be charged to the students.
- The training, Lab visit shall be conducted at the LGNSCOE or Industry facility in a time bound manner as per availability and schedule of both parties.

**8. General:**

- Both the parties may receive information proprietary to other party (the “Confidential Information”) in the course of performance of their obligations under this MoU. Confidential Information is not meant to include any information which (a) is publicly available (b) is rightfully received by the parties from third parties without accompanying secrecy obligations; (c) is already in either party’s possession and was lawfully received from sources other than the parties or (d) is independently developed by the parties. The two bodies understand and acknowledge that the Confidential Information is valuable and confidential and agrees that it will at all times be kept in trust, to be disclosed only to such persons as have a “need to know” the same for the effective implementation of this MOU and that it will only be used by the parties for the benefit of others.
- Both the parties understand and agrees that all written or other tangible data and documentation developed or procured by the other party in performing its obligations under this MoU, whether in printed or electronic form, belongs to other party.
- Both parties shall not use the name and brand of the other party in any advertisement or make any public announcement without the prior written approval of the other.
- Each party shall be at liberty to terminate this MoU with a written notice period of one (1) month to the other party without any compensation.
- Any and all disputes or differences between LGNSCOE and Industry arising out of or in connection with this MoU or its performance shall, so far as it is possible, be settled by negotiations between the Parties amicably through consultation & understanding.

**9. Indemnification :**

- Both the parties shall indemnify and hold each other harmless from and against any claim, loss, liability, or expense, including, but not limited to, damages, patent and trademark infringement, costs.
- In witness whereof, both parties put their hard seal on the day, month and year herein mentioned.





IN WITNESS WHEREOF, to show their assent, the duly authorized representative of the parties here to have signed the Agreement and set their seals as below:-

Signed for and on behalf of for

Signed for and on behalf of for

**M/s Jadhav Casting  
D/1, D-1/25, MIDC Ambad, Nashik,  
Maharashtra 422010**

**KCT's Late Gambhirrao Natuba Sapkal  
College of Engineering,  
Anjaneri, Nashik**

**Mr. Nivrutti Jadhav  
Proprietor**

**Prof. (Dr.) S. B. Bagal  
Principal**

**Prof.(Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.**



Date: 24/05/2023

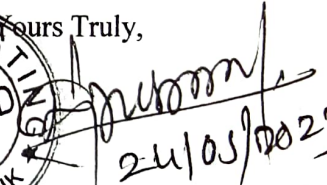
To,  
The Principal,  
Late G. N. Sapkal COE,  
Nasik.

**Subject:** Permission of visit for students of Second year Mechanical Engineering...

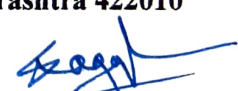
Dear Sir,

As per your letter of Ref. No. KCT/GNSCOE/MECH/2022-23/642; Dated: 24/05/2023, we would like to inform you that your second year Mechanical Students visit to our Company to gain the Practical knowledge Service Station is permitted on 25<sup>th</sup> May 2023.



Yours Truly,  
  
24/05/2023

The Proprietor,  
M/s, Jadhav Cating,  
D/1, D-1/25, MIDC Ambad,  
Nashik, Maharashtra 422010

  
Prof. (Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.



Kalyani Charitable Trust's

## LATE G. N. SAPKAL COLLEGE OF ENGINEERING

Sapkal Knowledge Hub, Kalyani Hills, Anjaneri, Trimbakeshwar Road, Nashik - 422 213. (India)  
Tel.: +91 - 2594 - 220168/69/70, Fax : +91 - 2294 - 220174.  
E-mail : gns\_engineering@sapkalknowledgehub.org | www.sapkalknowledgehub.org



**Prof.(Dr.) Sahebrao B. Bagal**  
M.E. (Electronics), Ph.D. (E & TC)  
PRINCIPAL

**Affiliated to** : Savitribai Phule Pune University (ID. No. PU/NA/Engg./152/2009 Ref.No.-CA/6501 Dated-1/11/2009)  
**Approved By** : A.I.C.T.E., New Delhi (F.N: 06/07/MS-Engg/2008/O-17, Dated- 11<sup>th</sup> June 2009)  
Govt. of Maharashtra (No. GEC-2009/(67/09)/T.E.-4, Dated - 15<sup>th</sup> June 2009.  
D.T.E., M.S., Mumbai (No.2/NGC/Engg./Approval/2009/535, Dated - 23<sup>rd</sup> July 2009)

Ref. No.: KCT/LGNSCOE/MECH/2022-23/ 642

Date: 24-May-23

To,  
The Proprietor,  
M/s, Jadhav Casting,  
D/1, D-1/25, MIDC Ambad, Nashik, Maharashtra 422010

**Subject:** Academic Visit to Second Year Students of Mechanical Engineering to Jadhav Casting  
Dear Sir/Madam,

We would like to introduce our self as one of the emerging institute in Nashik District. We are affiliated to Savitribai Phule Pune University and cater for five Bachelor's degrees in Engineering, viz. Bachelor in Civil Engineering, Computer Engineering, Electronics & Telecommunications, Electrical Engineering and Mechanical Engineering.

As a part of syllabus, the students of **Second Year Mechanical Engineering** are required to visit Casting Industry to gain the Practical knowledge on Casting Processes. We would really appreciate if you could permit our students to visit your esteemed organization and gain practical insights of the unit and its related parameters.

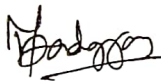
The students are 49 in number and will be accompanied **2 faculty** members to maintain discipline and safety. We need permission for *One day* so that 49 students along with two faculty members can visit on day. Kindly allot the dates of visit in between **25<sup>th</sup> May, 2023 to 26<sup>th</sup> May, 2023** as per your convenience. We do humble request you to consider our proposal and sanction permission to our students to visit your prestigious project.

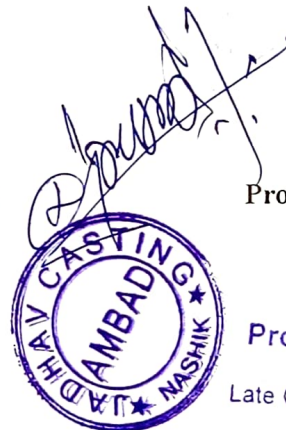
**Details of Visit Coordinator** is as follows:


Name: Prof. K. W. Kale (Mob. No: +91-9764138323)  
E-mail ID: [kishor.kale@sapkalknowledgehub.org](mailto:kishor.kale@sapkalknowledgehub.org)


Thanking you

Yours truly,

  
Prof. (Dr.) T. Y. Badgujar  
HOD (Mechanical)



  
Prof. (Dr.) S. B. Bagal  
Principal

  
Prof. (Dr.) Sahebrao B. Bagal  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.

**CORPORATE OFFICE** : Sapkal Knowledge Hub, "Parag" 46, Ashwin Sector, Opp. Hotel Sai Palace, Mumbai - Agra Highway, Nashik - 422 009. Ph.: +91 - 253 - 2392450 / 51, Fax : +91 - 253 - 2375557. Website : [www.sapkalknowledgehub.org](http://www.sapkalknowledgehub.org)

**MUMBAI OFFICE** : Sapkal knowledge Hub, Unit No. 22, 1st Floor, Shubhada Tower Shopping Center, Sir Pochkanwala Road, Near R.T.O. Office, Worli, Mumbai-400 030. Tel.: +91-22 - 24938914 / 24938915, Fax : +91 - 22 - 24938919.

**TITLE: Visit report on foundry process and demonstration.**

**Aim: Industrial visit to Foundry process and demonstration**

### **A Report on Industrial Visit**

**Title/Aim** : To study casting process and its various stages with demonstration

**Objectives of visit:**

1. To study Foundry Process and gain practical knowledge
2. To demonstrate the practical process of Foundry

#### **Overview of visit:**

**Subject: Machine Shop**

**Class /Div. :** SE Divisions A

**No of students:** 49 **Date :** 25/05/2023

**Name & address of company:** M/S Jadhav Castings, Ambad MIDC, Ambad Nashik

#### **Company Profile:**

Established in 2007, Jadhav Casting is a manufacturer and service provider offering an enormous consignment of Flour Mill, Pulverizer Machines, Flour Mill Repairing Service, Automatic Flour Mill

Repairing Service and much more. Immensely acclaimed in the industry owing to their preciseness,

these are presented by us in standard and modified forms to our clients. These are inspected sternly to retain their optimum quality.

Under the administration of our guide Mr. Kanta Jadhav, we have garnered a reputed position in this

highly competitive industry.

**Products Manufactured by Company:** - Bearing housings, Engine components, alloy and copper Castings etc.

#### **Points studied in details:**

Second year students of Mechanical Engineering are studying a course on Machine Shop . The course is framed to enable graduating students to take up the challenges and perform practical's on machine shop operations and manufacturing processes. In this endeavour, a visit to study foundry process was planned as per curriculum.

#### **Sand Mold Making Procedure**

- Place the pattern on the molding board then drag is placed on the board
- Dry facing sand is sprinkled over the board and pattern to provide a non-sticky layer.
- Molding sand is then riddled in to cover the pattern with the fingers; then the drag is completely filled.



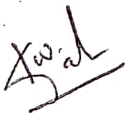


- The sand is then firmly packed in the drag by means of hand rammers. The ramming must be proper i.e. it must neither be too hard or soft.
- After the ramming is over, the excess sand is leveled off with a straight bar known as a strike rod.
- The finished drag flask is now rolled over to the bottom board exposing the pattern
- Cope half of the pattern is then placed over the drag pattern with the help of locating pins. The cope flask on the drag is located aligning again with the help of pins
- The dry parting sand is sprinkled all over the drag and on the pattern.
- A sprue pin for making the sprue passage is located at a small distance from the pattern. Also, riser pin, if required, is placed at an appropriate place
- The operation of filling, ramming and venting of the cope proceed in the same manner as performed in the drag
- The sprue and riser pins are removed first and a pouring basin is scooped out at the top to pour the liquid metal.
- Then pattern from the cope and drag is removed and facing sand in the form of paste is applied all over the mold cavity and runners which would give the finished casting a good surface finish.
- The mold is now assembled. The mold now is ready for pouring.
- The molten metal then poured into the mold cavity.
- After some time when mold is cooled down the cope and drag are separated to get the final casting out of the box.
- After casting the extra burr is removed by different finishing process to get the finished product.

### Conclusions:

1. Students understood the process of foundry manufacturing process.
2. Various stages of casting, steps have been studied by students by demonstration.

Signature of faculty coordinator:



Prof. K. W. Kale:




**Prof.(Dr.) Sahebrao B. Bagal**  
Principal  
Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 212.



**Industrial Visit at Jadhav Casting, Ambad, Nashik**



**Principal**  
KCT's, Late G. N. Sapkal  
College of Engineering  
Anjaneri, Nashik-422 212.



Machine Shop Visit at Ambar Auto Engineers, Jadhav Castings and Pooja Industries, Ambad MIDC, Nashik -10.

Date – 25/05/2023

Sr. No.	Name of Student	Signatures
1	GAIKWAD SANKET KAILAS	
2	GORE PRATIK ASHOK	
3	KAMBALE NIKHIL RAJENDRA	
4	RATHOD ATUL SAINATH	
5	SHINDE JAYESH PRALHAD	
6	SONAWANE SAHIL PRAKASH	
7	WAGH HEMRAJ VASANT	
8	AHIRE KHUSHAL SANTOSH	
9	AHIRE PARTH PARAG	
10	ATTAR FARHAN RAFIK	
11	BARVE VEDIKA SUNIL	
12	BAVISKAR SHUBHAM JALINDAR	
13	BHAGWAT NIKHIL SANJAY	
14	BHAMARE VAISHNAV BAPU	
15	BORADE SAURABH DASHRATH	
16	CHAUDHARI BHUSHAN DILIP	
17	DESHMANE PRATIK DNYANESHWAR	
18	GADE OMKAR JALINDAR	
19	GAIKWAD MANAS ANAND	
20	GANGODE VAIBHAV KAILAS	
21	GAVIT RAVIRAJ KARAMSINGH	
22	GODGE SHUBHANGI RAVINDRA	
23	HIRE PRATIK VASANT	
24	IRNALE ASHISH SACHIN	
25	JADHAV AAKASH BHAUSAHEB	
26	JADHAV MOHIT KHEMRAJ	
27	JEUGHALE OM PRAVIN	
28	KAPSE KALYANI MAHENDRA	
29	KHAIRNAR DIPESH GAUTAM	
30	KHAN SARIK SHAMSHAD	
31	KUMAVAT ASHISH GORAKH	
32	MAINKAR PAURAS NILESH	
33	MOHITE AJIT DILIP	
43	NAWALE ADITYA RAJENDRA	
35	PADMAKAR HARI SHINKAR	
36	PAGAR CHETAN BHAUSAHEB	
37	PAGARE HEMANT SOPAN	
38	PAIKRAO VISHAL NAGESH	
39	PANGAVHANE DHANANJAY PANDITRAO	
40	PATEL MOHAMMAD GAUS SAMEER	
41	PAWAR AVISHKAR NARAYAN	



Prof.(Dr.) Sahebrao B. Bagal  
Principal

Late G. N. Sapkal College of Engineering  
Anjaneri, Nashik-422 213.

42	SALUNKHE MANISH KISHOR	MKS
43	SHAIKH AFNAN ARSHAD	AAB
44	SHINGADE PRADIP BHAUSAHEB	Pradip
45	SOHAIL SALIM MANIYAR	Sohail
46	SONAWANE MAYUR ABAJI	Mayur
47	TAMBDE MAHESH SANJAY	Sanjay
48	TORANE AKASH REVNNATH	Akash
49	TUSHAR EKNATH UNDE	Tushar
50		



*Bagal*  
**Prof.(Dr.) Sahebrao B. Bagal**  
 Principal  
 Late G. N. Sapkal College of Engineering  
 Anjaneri, Nashik-422 213.



## Conduction Certificate

This is to certify that the 02 faculty member and 49 Students of Late G. N. Sapkal College of Engineering have visited our industry on 25<sup>th</sup> May, 2023 (Thursday). The purpose of visit is to learn to gain practical knowledge of Foundry Process and Industrial Knowledge Sharing.

This visit is planned as per academic curriculum of the subject Machine Shop. Students learn the working and exposure of process, which is explained by our expert during the visit. The behavior of students was good during visit.



**M/s, Jadhav Cating,  
D/1, D-1/25, MIDC Ambad,  
Nashik, Maharashtra 422010**