

**ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY**

**Shobhavana Campus, Mijar – 574225, Moodbidri.**

**Dakshina Kannada Karnataka, India.**



**Department of Mechanical Engineering**

**CERTIFICATION COURSE**

**On**

**“General Fabrication Work”**

**FOR THE ACADEMIC YEAR**

**2017-18**



# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

Shobhavana Campus, Mijar, Moodbidri - 574 225

Phone: 08258-262725 Fax: 08258-262726

## DEPARTMENT OF MECHANICAL ENGINEERING

Date: 18/12/2017

### APPROVAL LETTER

To,

The Principal,  
AIET, Moodbidri

Respected Sir,

**Sub: - Approval for Organizing the Students Certification/Training Program on "General Fabrication Work"-Reg.**

With reference to the subject cited above, I would like to bring to your kind notice that, the Department is planning to host a **Five day's** Student Training Program/ hands on workshop on "**General Fabrication Work**" from "22<sup>nd</sup> Jan 2018 to 26<sup>th</sup> Jan 2018".

Kindly consider the above request and approve the same for further proceedings.

Thanking you Sir.

  
**Coordinator:**

**Mr. Hemanth S**

  
**Head of the Department:**

**H.O.D.**  
**Prof. K. V. Suresh**  
Dept. of Mechanical Engineering  
Alva's Institute of Engg. & Technology,  
Mijar, MOODBIDRI - 574 225

  
**Principal:**

**PRINCIPAL**

Alva's Institute of Engg. & Technology,  
Mijar, MOODBIDRI - 574 225, D.K.

Place: AIET, Moodbidri.



# ALVA'S INSTITUTE OF ENGINEERING AND TECHNOLOGY

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DEPARTMENT OF MECHANICAL ENGINEERING

Date: 17/11/2018

## CIRCULAR

All the students are hereby informed that there is a certification course on about General Fabrication Work which is scheduled from 22.01.2018 to 26.01.2018, which is conducted by Mr. Veerendra Kumar & Mr Raghavendra B, AIET, Dept of mechanical engineering, moodbidri. Interested students kindly register your names on or before 20.01.2018.

  
**Head of the Department:**  
**H. O. D.**  
Dept. Of Mechanical Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225



**ALVA'S INSTITUTE OF ENGINEERING AND  
TECHNOLOGY, MOODBIDRI**

**DEPARTMENT OF MECHANICAL ENGINEERING**

Cordially invites you to the  
**Inauguration of Certification Program**  
On  
**“ General Fabrication Work ”**

**Resource Person: Mr. Veerendra Kumar & Mr Raghavendra B**

**Dept. of ME, AIET Moodbidri**

**Guest of Honor: Mr. Vivek Alva**

**Managing Trustee**

**President: Dr. Peter Fernandes**

**Principal, AIET, Moodbidri.**

**Coordinator**

**Mr. Hemanth S**

**Assistant Professor**

**Head of the Department**

**Mr K V Suresh**

**Associate Professor and Head**

**Venue: AIET MECH Block@9.00AM**

❖ **Invocation**

❖ **Welcome Speech**

❖ **Introducing the Chief Guest**

❖ **Honoring the Chief Guest**

❖ **Inauguration**

❖ **Presidential Speech**

❖ **Vote of Thanks**



## ABOUT VTU, BELAGAVI

Visvesvaraya Technological University is a collegiate public state university in Karnataka State, India. It was established by the Government of Karnataka. The university is named after M. Visvesvaraya from Karnataka, the only engineer to be awarded a "Bharat Ratna", the highest civilian award in India. Jnana Sangama, Belagavi is the headquarters of VTU. Additionally, the university has three regional centers in Bangalore, Gulbarga and Mysore. VTU is one of the largest universities in India with 212 colleges affiliated to it with an intake capacity of over 467,100 undergraduate students and 12,666 postgraduate students. The university encompasses technical and management fields which offer 30 undergraduate and 71 postgraduate courses. It has around 1800 PhD candidates. VTU has 13 QIP centers and 17 extension centers in its affiliated colleges offering postgraduate courses. It has around 2,305 departments recognized as research centers which are spread across its affiliated institutions in cities of Karnataka.

## AIET, MOODBIDRI

Alva's Education Foundation (AEF) established in 1995 with the vision of our Chairman Dr. M. Mohan Alva has succeeded in making Moodbidri, an Educational hub in the South Canara Region, with more than 25000 students pursuing various courses ranging from primary school to post-graduate courses in social sciences, pure sciences, engineering and management. There are 21 institutions functioning under the Alva's Education Foundation.

Alva's Institute of Engineering and Technology, Moodbidri is a Premier Engineering Institute of Alva's Education Foundation, established in the year 2008. The college is certified to the ISO 9001: 2008 standards. The institute offers top quality education in five under graduate programs in Engineering-Computer Science, Civil, Electronics & Communications, Information Science, and Mechanical Engineering-Three Post Graduate programs- Master of Technology in Thermal Power Engineering, Computer Science & Engineering, VLSI Design Embedded System and Master of Business Administration.

## DEPARTMENT OF MECHANICAL ENGINEERING

Department of Mechanical Engineering was established in the year 2008 with an intake of 60 and has enhanced to 180 from academic year 2012-13. The Post Graduate course, M.Tech in Thermal Power Engineering was introduced from the academic year 2012-13 with an intake of 18 students. Department is recognized as a research centre by VTU. Department is actively involved in Curricular and extracurricular activities in associations with professional bodies. The main objective of the department is to provide academic excellence, knowledge and nurture talent in the area of Mechanical Engineering. The department has started Bio Diesel research testing centre in the campus to explore in the area of Alternative Fuels.

Department vision is to develop Quality Mechanical Engineers to meet the ever growing and ever changing needs of the economy. The Department is committed to provide high quality technical education at under graduate and post graduate level by means of state of art curriculum with best teaching-learning process.

## About General Fabrication Work Course

Metal fabrication is the process of building machines and structures from raw metal materials. The process includes cutting, burning, welding, machining, forming, and assembly to create the final product.

Metal fabrication projects include everything from hand railings to heavy equipment and machinery. Specific subsectors include cutlery and hand tools; architectural and structural metals; hardware manufacturing; spring and wire manufacturing; screw, nut, and bolt manufacturing; and forging and stamping.

The main benefit of metal fabrication shops is the centralization of these many processes that are often required to be performed in parallel via a collection of vendors. A one-stop metal fabrication shop helps contractors limit their need to work with multiple vendors to complete complicated projects.

## COURSE CONTENT

1. Introduction to Fabrication work
2. Professional Knowledge & Domain/Technical Knowledge
3. Professional /Technical Skills
4. Core Skills

## RESOURCE PERSON

**Mr. Veerendra Kumar & Mr Raghavendra B**  
Assistant Professor

Department of Mechanical Engineering, AIET  
Moodbidri

## Organizing committee

Mr.shailesh B G, Mr. Raghavendra B, Mr.  
Raghavendra P

Assistant Professor

Department of Mechanical Engineering AIET  
Moodbidri

## PROGRAM SCHEDULE

### January 22, 2018

Inauguration:	09:00 am to 09:30 am
Tea Break:	9:30 am to 9:45 am
Session 1:	9:45 am to 01:00 pm
Lunch Break:	01:00 pm to 02:00 pm
Session 2:	02:00 pm to 05:00 pm

### January 23, 2018

Session 3:	09:30 am to 11:00 am
Lunch Break:	01:00 pm to 02:00 pm
Session 4:	02:00 pm to 05:00 pm

### January 24, 2018

Session 5:	09:30 am to 11:00 am
Lunch Break:	01:00 pm to 02:00 pm
Session 6:	02:00 pm to 05:00 pm

### January 25, 2018

Session 7:	09:30 am to 11:00 am
Lunch Break:	01:00 pm to 02:00 pm
Session 8:	02:00 pm to 05:00 pm

### January 26, 2018

Session 9:	09:30 am to 11:00 am
Lunch Break:	01:00 pm to 02:00 pm
Session 10:	02:00 pm to 04:00 pm
Valedictory:	04:30 pm to 05:00 pm





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## DEPARTMENT OF MECHANICAL ENGINEERING

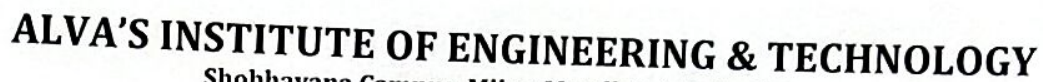
### General Fabrication work-- ATTENDANCE REPORT-2017-18

SLN	USN	NAME(Caps Only)	22-01		23-01		24-01		25-01		26-01	
			FN	AN	FN	AN	FN	AN	FN	AN	FN	AN
1.	4AL15ME032	Dhanik N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2.	4AL15ME097	Yeshwanth M	✓	A	✓	✓	✓	✓	✓	✓	✓	✓
3.	4AL16ME003	Abhishek H Shetty	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4.	4AL16ME004	Ajay Paul	A	✓	✓	✓	✓	✓	✓	✓	✓	✓
5.	4AL16ME006	Akhil Mohan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.	4AL16ME007	Anil Kumar	✓	✓	✓	✓	✓	✓	A	✓	✓	✓
7.	4AL16ME009	Bavini	✓	A	✓	✓	✓	✓	✓	✓	✓	✓
8.	4AL16ME010	Blesson Xavier	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9.	4AL16ME011	ChandrashekarKulal	✓	✓	A	✓	✓	✓	✓	✓	✓	A
10.	4AL16ME012	Chethan N	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11.	4AL16ME013	Chinmaya G A	✓	✓	✓	A	✓	✓	✓	✓	✓	✓
12.	4AL16ME014	ChiragPoojari	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
13.	4AL16ME015	MoolyaDivyaraj Raghu	✓	✓	✓	✓	✓	A	✓	✓	✓	✓
14.	4AL16ME016	Ganesh V Kadappanavar	A	✓	✓	✓	✓	✓	✓	✓	✓	✓
15.	4AL16ME017	HarikrishnaRaju	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16.	4AL16ME018	S A Hithesh Raj	✓	✓	✓	✓	✓	✓	✓	✓	A	✓
17.	4AL16ME019	Karthik S Mendon	✓	A	✓	✓	✓	✓	✓	✓	✓	✓
18.	4AL16ME020	Kevin Joseph Lobo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
19.	4AL16ME021	Kiran Kumar	✓	✓	✓	✓	A	✓	✓	✓	✓	✓
20.	4AL16ME022	Kishore Kumar A	✓	✓	✓	✓	✓	✓	✓	✓	A	✓
21.	4AL16ME024	Manil U	✓	✓	A	✓	✓	✓	✓	✓	✓	✓
22.	4AL16ME028	Manojgowda K N	✓	✓	A	✓	✓	✓	✓	✓	✓	✓
23.	4AL16ME029	Manoj Kumar D	A	✓	✓	✓	✓	✓	✓	✓	✓	✓

Coordinator

Dept. Of Mechanical Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225





**Phone: 08258-262725, Fax: 08258-262726**

H.O.D.  
Dept. Of Mechanical Engineering  
Alva's Institute of Engg. & Techno  
Mijar, MOODBIDRI - 574 233





# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY

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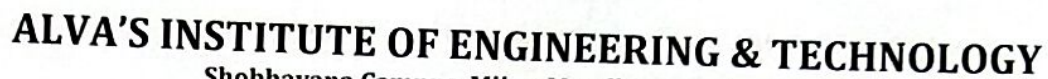
## DEPARTMENT OF MECHANICAL ENGINEERING

49.	4AL16ME066	Sanjay S	✓	✓	✓	✓	A	A	A	✓	✓	✓
50.	4AL16ME067	Santhosh G B	✓	A	✓	✓	✓	✓	✓	✓	A	✓
51.	4AL16ME068	SanthoshChndrashekhar	✓	✓	✓	A	A	✓	A	✓	✓	✓
52.	4AL16ME069	ShaikMohamadSafwan	✓	✓	✓	✓	✓	✓	A	✓	✓	✓
53.	4AL16ME070	ShettyAditArvind	✓	✓	✓	✓	✓	✓	A	✓	✓	✓
54.	4AL16ME071	ShettyAkashVasanth	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
55.	4AL16ME072	ShettyGaurav Ramesh	✓	A	✓	A	✓	✓	✓	✓	✓	✓
56.	4AL16ME073	ShettyManojManmatha	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
57.	4AL16ME074	ShettyPranayRadhakrishna	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
58.	4AL16ME075	Shetty Pratik Jagannath	✓	✓	✓	✓	✓	A	✓	✓	✓	✓
59.	4AL16ME076	ShettyRohithJayaprakash	✓	A	✓	✓	✓	✓	✓	✓	✓	✓
60.	4AL16ME077	Shikhar V Raj Jain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
61.	4AL16ME078	ShivakumarKataraki	✓	✓	✓	A	✓	✓	✓	✓	A	✓
62.	4AL16ME080	SohanPoojari S S	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
63.	4AL16ME081	SonalTomy	✓	✓	✓	✓	✓	A	✓	✓	✓	✓
64.	4AL16ME082	Soufia N Shaikh	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
65.	4AL13ME134	Anoop R B	✓	✓	✓	A	✓	✓	✓	✓	✓	✓
66.	4AL14ME030	Gurumurthy J L	✓	✓	✓	✓	✓	✓	✓	✓	A	✓
67.	4AL14ME031	Harsha Raj	A	✓	✓	✓	✓	✓	✓	✓	✓	✓
68.	4AL14ME037	Jyothish Kumar K P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69.	4AL14ME096	Shravika K A	✓	✓	✓	✓	✓	✓	A	✓	✓	✓
70.	4AL14ME109	Aishwarya P Bhandarkar	✓	✓	✓	✓	A	✓	✓	✓	✓	✓
71.	4AL15ME005	Adithya K V	✓	A	✓	✓	✓	✓	✓	✓	A	✓
72.	4AL15ME007	Akash	✓	✓	✓	✓	A	A	✓	✓	✓	✓
73.	4AL15ME008	Akash B P	✓	✓	✓	A	✓	✓	✓	✓	✓	✓

Coordinator

H.O.D.  
Dept. Of Mechanical Engineering  
Alva's Institute of Engineering & Technology  
Mijar, MOODBIDRI 574 225





**Phone: 08258-262725, Fax: 08258-262726**

**DEPARTMENT OF MECHANICAL ENGINEERING**

**Coordinator**

Dept. of  
Alva's Institute of Engg. & Technology  
Mian, MOODBIDRI - 574 828





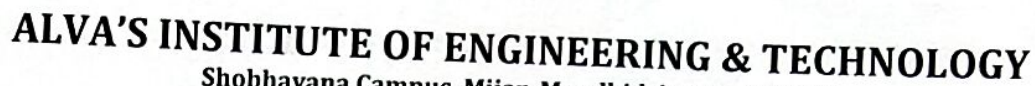
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**DEPARTMENT OF MECHANICAL ENGINEERING**

**Coordinator**

H. O. D.  
Dept. of Mechanical Engineering  
Alva's Institute of Engineering  
Mijar, MOODBIDRI - 571 302





Phone: 08258-262725, Fax: 08258-262726

**DEPARTMENT OF MECHANICAL ENGINEERING**

**Coordinator**

H. O. D.  
Dept. Of Mechanical Engineering  
Alva's Institute of Engineering & Technology  
Mysur, MANGALORE - 574 224





**Quiz on General fabrication work Course**

1. An Alloy is What?  
A. A mixture of two or more metals  
B. 1 metal ingredient  
C. Non Rustic  
D. A mixture of three or more metals
2. Sheet metal is broken down into the following five phases: Planning and layout, fabrication, assembly, repair/maintenance, and what?  
A. Design; B. Structure; C. Cost; D. Installation
3. Also known as scribes, it's used for marking lines on sheet metal. What hand tool is it?  
A. Scratch Awl; B. Ring Awl; C. Socket Scratch Awl; D. Shank Awl
4. It is used to draw long arcs and circles, is also called a beam compass?  
A. Pointer; B. Compass; C. Trammel Points; D. Arc Scriber
5. Slightly curved face with beveled edges to prevent the head of the hammer from marking metal. What tool is it?  
A. Setting Hammer; B. Ball peen; C. Mallet; D. Riveting Hammer
6. Has a square flat face. Used for flattening seams with damaging the metal. What tool is it?  
A. Ball Peen Hammer; B. Setting Hammer; C. Mallet; D. Riveting Hammer
7. May be either straight or combination blade snips. Used for routine cutting on 26 Gauge or lighter. What type of snips?  
A. General Purpose Snips  
B. Aviation Snips  
C. 30 Degree Snips  
D. Bull Dog Snips
8. Come in left handed (green), right handed (red), and straight cutting (yellow) and are used for cutting small irregular curves, including corners of 90 degree angles.  
A. General Purpose Snips  
B. Bulldog Snips  
C. Aviation Snips  
D. Dove Tail Snips
9. Have flat jaws with small grooves and are used for forming and holding work. What is the tool?  
A. Round Nose Pliers  
B. Flat Nose Pliers  
C. Slip-Joint Pliers  
D. General Pliers
10. This file is all purpose, single cut file and used for finish filing. What kind of file is it?  
A. Mill File  
B. Knife File  
C. Three Square File  
D. Flat File
11. Commonly called a Cornice brake, it is used for bending and folding the edges of metal. What part is it?  
A. Clamping Handle  
B. Bending Leaf Handle  
C. Hand Brake  
D. Rotary Handle
12. Used to drill holes that require a high degree of accuracy. What machine is it?  
A. Drill Press  
B. Bench Press  
C. Drill Grinder





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Quiz on General fabrication work Course

D. Bench Grinder

13. Used to form various edges and seams. Bends metal 22 gauge and lighter. Bends up to 165 degrees and lengths up to 36". What is it?

- A. Bench Grinder
- B. Bar folder
- C. Bender
- D. Vises

14. Bend Radius is the degree of sharpness or square in the finished bend. There must be an allowance for the sheet metal that is being bent; this allowance is known as what?

- A. Bend Radius
- B. Pittsburgh Pocket Bend
- C. Overall Radius
- D. The Setback

15. Commonly known as drill bits, they are used to drill holes in sheet metal and other construction materials. They can be made of carbon steel or high speed alloy steel. What is it?

- A. Spiral Drills
- B. Twist Drills
- C. Drill Bits
- D. Shank Bits

16. The files that has a single row of teeth extending across the face at an angle of 65 degrees is a \_\_\_\_ cut file.

- A. Mill Cut File
- B. Single Cut File
- C. Double Cut File
- D. Flat Cut File

17. When using grinders, you should never grind on the ----?---- of the wheels.

- A. Corner
- B. Back
- C. Side
- D. Metal

18. What will happen if there is too much difference in the handle adjustment when changing the clamping pressure on the top leaf of the cornice brake?

- A. Uneven Bending
- B. It won't hold down correctly
- C. It will fly off the bender
- D. Nothing

19. Which hand held punch is used to mark points when laying out patterns on sheet metal?

- A. Center Punch
- B. Prick punch
- C. Solid Punch
- D. Hollow Punch

20. Electric drill can be single speed or variable and almost always includes a reverse gear. A drill is manufactured in what sizes?

- A. 1/4", 5/8", 1/2"
- B. 3/8", 5/8", 1/2"
- C. 1/4", 3/8", 1/2"
- D. 1/4", 3/8", 1"





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DEPARTMENT OF MECHANICAL ENGINEERING

## FEEDBACK FORM

Five days Students Training Program  
On

### "General Fabrication Work"

For the following areas, please indicate your rating from 1 to 5:

1=strongly Disagree 2=Disagree 3=neither agree nor disagree 4=Agree 5=strongly Agree

SN	Topics	1	2	3	4	5
<b>A.</b>	<b>Content</b>					
1	Understood the basics fabrication work					✓
2	Understood the fundamental of different application					✓
3	Able to apply the techniques for the problems at the hand.					✓
4	Understood the fundamentals of different materials				✓	
5	Able to do practical work					✓
<b>B</b>	<b>Presentation</b>					
6	Instructor's knowledge				✓	
7	Instructor's presentation style				✓	
8	Instructor covered material clearly					✓
9	Instructor responded well to questions					✓
10	Instructor facilitated interactions among participants well					✓
<b>C. How could this workshop be improved?</b> <div>— M —</div>						
<b>D. Any other comments or suggestions?</b> <div>— M —</div>						
<b>E. Overall, how would you rate this workshop?</b>						
<input type="checkbox"/>	Poor	<input type="checkbox"/>			Good	
<input type="checkbox"/>	Neither Good Nor Poor	<input checked="" type="checkbox"/>			Excellent	





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## DEPARTMENT OF MECHANICAL ENGINEERING

### Report on General Fabrication Work

The department of ME conducted a Five Days hands on students training program for the students of ME from 22-01-2018 to 26-01-2018 on "General Fabrication Work" at AIET Moodbidri.

Mr. Veerendra Kumar & Mr Raghavendra B, Department of Mechanical Engineering AIET, Moodbidri delivered a comprehensive and in depth information about the Fundamentals General Fabrication Work, Techniques, Applications. Participants have enthusiastically participated and learnt the application building.

Photo



*Handwritten signature*  
H.O.D.  
Dept. Of Mechanical Engineering  
Alva's Institute of Engg. & Technology  
Mijar, MOODBIDRI - 574 225



# ALVA'S INSTITUTE OF ENGINEERING & TECHNOLOGY MOODBIDRI



A Unit of Alva's Education Foundation®  
(Affiliated to VTU, Belagavi and Approved by A.I.C.T.E., New Delhi)  
Shobhavana Campus, Mijar, Moodbidri DK Karnataka-574225

DEPARTMENT MECHANICAL ENGINEERING



*This is to certify that Mr./Ms.....bearing the  
USN ..... from ..... has attended  
the Students Training Program on "General Fabrication  
Work" from 22<sup>nd</sup> January 2018 to 26<sup>th</sup> January 2018*

\_\_\_\_\_  
Mr. Hemanth S  
Coordinator

\_\_\_\_\_  
Head of the Department  
Mechanical Engineering

\_\_\_\_\_  
Dr. Peter Fernandes  
Principal  
AIET Moodbidri