

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 HYDRAULIC AND PNEUMATICS COURSE

This course is an introduction to the basic hydraulic and pneumatic systems and devices found in advanced manufacturing facilities. Underlying scientific principles and their practical applications are covered. The laboratory reinforces the principles learned through hands-on experiments

Hydraulics and pneumatics have almost unlimited application in the production of goods and services in nearly all industry sectors. Students develop employment skill sets through direct, hands-on training in one of the fastest-growing fields in the nation. Students taking this course will also understand the importance of organizational requirements such as time tables, deadlines, schedules, and self-disciplined learning

COURSE CONTENT

1. Introduction to Hydraulic and Pneumatics
2. Fluid Power Systems and Fundamentals
3. Components of Hydraulic System
4. Hydraulic System Fundamentals
5. Design of Hydraulic circuits
6. Directional Control
7. Flow Control
8. Hydraulic Actuators
9. Pressure Control
10. Hydraulic Fluid Maintenance
11. Pneumatic System Fundamentals & Electrical
12. Fluid Power System Maintenance and Troubleshooting

RESOURCE PERSON

Mr. Suresh P S & Mr. Ganesh M R

Assistant Professor,
Department of Mechanical Engineering, AIET
Moodbidri

PROGRAM SCHEDULE

JANUARY 20, 2015

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 21, 2015

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 22, 2015

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 23, 2015

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 24, 2015

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

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

DEPARTMENT OF MECHANICAL ENGINEERING

Cordially invites you to the

Inauguration of Certification Program

On

“HYDRAULIC AND PNEUMATICS”

Resource Person: Mr. SURESH P S & GANESH M R

Assistant Professor, 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**