

MATA KULIAH	Nama Mata Kuliah : Troubleshooting
	Kode MK : VI231732
	Kredit : 3 SKS
	Semester : VII

DESKRIPSI MATA KULIAH

MK Troubleshooting berada di semester VII dengan bobot 3 sks. Matakuliah Troubleshooting ini termasuk dalam rumpun matakuliah Instrumentasi Safety di Departemen Teknik Instrumentasi FV –ITS. Mata kuliah ini membahas tentang kegiatan troubleshooting serta penerapannya dalam sistem instrumentasi industri.

CAPAIAN PEMBELAJARAN LULUSAN YANG DIBEBANKAN MATA KULIAH

- Mampu berkomunikasi, menulis laporan serta membuat presentasi secara efektif. (CPL-4)
- Mampu mengidentifikasi, merumuskan, meneliti literatur dan menganalisis masalah teknik di bidang teknologi Instrumentasi untuk mencapai kesimpulan yang dapat dibuktikan dengan menggunakan alat analisis sesuai standar disiplin ilmu teknik instrumentasi. (CPL-6)
- Mampu melakukan investigasi terhadap permasalahan instrumentasi industri, mencari, memilih data yang relevan dari literatur, merancang dan melakukan eksperimen untuk memberikan kesimpulan yang valid. (CPL-8)
- Mampu memilih, menggunakan dan menerapkan teknik dan sumber daya yang tepat termasuk penggunaan piranti keras maupun lunak yang mutakhir untuk memberikan solusi atas permasalahan di bidang rekayasa Instrumentasi. (CPL-9)
- Mampu memahami dan mengevaluasi keberlanjutan dampak pekerjaan teknologi rekayasa Instrumentasi terhadap lingkungan dan masyarakat. (CPL-11)

CAPAIAN PEMBELAJARAN MATA KULIAH
<ul style="list-style-type: none">● Mahasiswa mampu memahami keselamatan dan kesehatan kerja (K3) dalam kegiatan troubleshooting.● Mahasiswa mampu mengidentifikasi kerusakan dan kegagalan pada peralatan instrumentasi.● Mahasiswa mampu menganalisis permasalahan dan bentuk bahaya pada peralatan instrumentasi.● Mahasiswa mampu menerapkan metode troubleshooting pada peralatan instrumentasi.
POKOK BAHASAN
<ul style="list-style-type: none">● Menerapkan K3 dalam troubleshooting.● Analisis Kerusakan Peralatan Instrumentasi.● Metode Cleaning dan Perbaikan serta Pengujian Peralatan Instrumentasi.
PRASYARAT
PUSTAKA
Utama: 1. Handbook of Commissioning Management, (Institution of Engineering and Technology, 2008) Pendukung:

COURSE	Course Name : Troubleshooting
	Course Code : VI231732
	Credit : 3 SKS
	Semester : VII

DESCRIPTION OF COURSE

Troubleshooting course is in semester VII with a weight of 3 credits. This Troubleshooting course is included in the Safety Instrumentation course in the FV –ITS Instrumentation Engineering Department. This course discusses troubleshooting activities and their application in industrial instrumentation systems.

LEARNING OUTCOMES

- Able to communicate, write reports and make presentations effectively. (CPL-4)
- Able to identify, formulate, research literature, and analyze technical problems in the field of Instrumentation technology to reach conclusions that can be proven by using analytical tools according to standard instrumentation engineering disciplines. (CPL-6)
- Be able to investigate industrial instrumentation problems, search for, select relevant data from the literature, design, and conduct experiments to provide valid conclusions. (CPL-8)
- Able to select, use and apply the right techniques and resources including the use of the latest hardware and software to provide solutions to problems in the field of Instrumentation engineering. (CPL-9)
- Able to understand and evaluate the sustainability of the impact of Instrumentation engineering technology work on the environment and society. (CPL-11)

COURSE LEARNING OUTCOME

- Students can understand occupational safety and health (K3) in troubleshooting activities.
- Students can identify damage and failure of instrumentation equipment.

<ul style="list-style-type: none">● Students can analyze problems and forms of danger in instrumentation equipment.● Students can apply the troubleshooting method to instrumentation equipment.
MAIN SUBJECT
<ul style="list-style-type: none">● Implement K3 in troubleshooting.● Instrumentation Equipment Damage Analysis.● Methods for Cleaning and Repairing and Testing Instrumentation Equipment.
PREREQUISITES
REFERENCE
Main: Support: