

**FAKULTAS TEKNIK DAN KEJURUAN**

**UNIVERSITAS PENDIDIKAN GANESHA**

  **Mengetahui**

**Mata Kuliah : Sistem Kendali Ketua Jurusan,**

**Kode : PTM 1245**

**Kredit : 3 SKS**

**Semester : VI**

**Pengasuh : Dr. Kadek Rihendra D, S.T.,M.T.**

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 **NIP. 19791201 200604 1 001**

**JURUSAN PENDIDIKAN TEKNIK MESIN**

**2016**

**Silabus**

**A. Identitas**

Jurusan : Pendidikan Teknik Mesin Kredit : 3 SKS

Mata Kuliah : Sistem Kendali Semester : VI

Kode : PTM 1245 Prasyarat : -

**B. Standar Kompetensi Lulusan**

Mahasiswa memahami tentang dasar – dasar statistic, quality improvement techniques, fundamentals of probability, acceptance sampling by attributes, computer and quality control dan total quality management

**C. Deskripsi**

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| --- | --- | --- | --- |
| No. | Standar Kompetensi | Kompetensi Dasar | Deskripsi Isi |
| (1) | (2) | (3) | (4) |
| 1 | Mahasiswa dapat mengetahui dan memahami konsep Quality Improvement Techniques | 1. Mahasiswa mampu memahami pareto diagram, matrix analysis, time series, histogram, control chart, run chart, problem solving
 | 1. Pareto Diagram
2. Matrix Analysis
3. Grier Diagram
4. Time Series
5. Cause effect Diagram
6. Check Sheet
7. Histogram
8. Control Chart
9. Process Capability
10. Scatter Diagram
11. Run Chart
12. Flow Diagram
13. Seven Management and Planning Tools
14. Problem solving Method
 |
| 2 | Mahasiswa dapat mengetahui memahami Fundamental of Statistic | 1. Mampu memahami frequency distribution, measure of dispersion, concept of a population and a sample, normal curve, computer program
 | 1Frequency distribution1. Measure of central tendency
2. Measures of dispersion
3. Concept of population and sample
4. Normal curve
5. Test for normality
6. Computer program
 |
| 3 | Mahasiswa dapat mengetahui dan memahami control charts for variables | Mampu memahami control chart techniques | 1. control charts techniques2. state of control3. spesifications4. process capability5. Different control chart |
| 4 | Mahasiswa dapat mengetahui dan memahami fundamentals of probability | 1. Mampu menjelaskan basic concept probability, discrete and continuous probability distribution, distribution
 | 1.basic concept2. discrete probability distributions3. continuous probability distributions4. distributions interrelationship |
| 5 | Mahasiswa dapat mengetahui dan memahami control charts for attriobutes | Mampu menjelaskan control charts for nonforming unit, a quality rating system | 1. Introductions
2. Control charts for nonconforming units
3. Control charts for count of nonconformities
4. A quality rating system
 |
| 6 | Mahasiswa dapat mengetahui dan memahami lot bye lot acceptance sampling by attributes | Mampu menjelaskan fundamental concept, statistical aspect dan sampling plan | 1. Fundamentals concept
2. Statistical aspects
3. Sampling plan design
 |
| 7 | Mahasiswa dapat mengetahui dan memahami acceptance sampling systems | Mampu menjelaskan acceptance sampling plans for variables dan continuous production | 1. Lot by lot acceptance sampling plans for attributes
2. Acceptance sampling plans for continuous production
3. Acceptance sampling plans for variables
 |
| 8 | Mahasiswa dapat mengetahui dan memahami reliability | Mampu menjelaskan life and reliability testing plans | 1. Fundamental aspects
2. Additional statistical aspects
3. Life and reliability testing plans
 |
| 9 | Mahasiswa dapat mengetahui dan memahami cost of poor quality | Dapat memahami analisa cost of poor quality | 1. Management technique
2. Cost of poor quality categories and elements
3. Collection and reporting
4. Analysis
5. Optimum
6. Quality improvement strategy
7. Program implementation
 |
| 10 | Mahasiswa dapat mengetahui dan memahami computers and quality control | Dapat memahami data analysis, reduction and reporting, statistical analysis, process control | 1. Data collection
2. Data analysis, reduction and reporting
3. Statistical analysis
4. Process control
5. Automated test and inspection
 |
| 11 | Mahasiswa dapat mengetahui dan memahami total quality management | Dapat memahami customer satisfaction, continuous process improvement, supplier management | 1. Basic approach
2. Leadership
3. Customer satisfaction
4. Employee involvement
5. Continuous process improvement
6. Supplier management
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**REFERENSI :**

1. Dale H. Besterfield, Quality Control, fifth edition,Prentice Hall, 1998.

Singaraja, 15 Pebruari 2016

 Dosen Pengampu,

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