

# Biomedical Engineering Department Institut Teknologi Sepuluh Nopember

## **Department Profile**

Biomedical Engineering is a multidiscipline field that is consisted of engineering fields applied to medical field and health care. Basically, Biomedical Engineering is an integration of disciplines in engineering sciences and medical sciences. As a multidiscipline fields, synergy of a mount of field of sciences have role in design, development, utilization of materials and medical equipment, exploring effective method in measurement, detection, signal and image processing, and intelligent system for diagnosis.







#### **Vision**

"Excellence and world class in education and research of Biomedical Engineering."

#### **Mission**

Produce scientific work which useful for society and develop human resources with competence in Biomedical Engineering with character: have high moral standards, have high competitiveness, capable to develop, improve and advance science and technology, able to contribute to the application of science and technology beneficial to the public interest.

Registration Information
New Student
Program SNMPTN, SBMPTN, and PKM
Smits.its.ac.id





### **Education**

Biomedical Engineering Department ITS (BME-ITS) aims to develop Indonesian human resources which have ability in analysis and synthesis in field on biomedical instrumentation, biomedical signal processing and analysis, biomechanics, control engineering for medical application, etc. With the capability, the graduated student is expected to have a role in industry of medical equipment, serving as clinical engineering, biomedical signal analyst, or rehabilitation engineer in medical and health care institutions.

Integrative Education Approach:
"Intellectual Curiosity Exploration, Leadership
& Technopreneurship and Character Development"

### Research

Research and education in BME ITS focus on Intelligent Biomedical Instrumentation, Assistive Technology and Rehabilitation Engineering, Medical Imaging and Medical Image Processing, and Medical Informatics.

#### **Research Product**

- Chair control for difabel using bioimpedance
- Multimodal cardiac analysis
- Cardiac telemonitoring using radio frequency 2m band
- Embedded FES system
- Wearable human movement sensor system, etc.



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