TKB213201

Biomaterial Engineering

Teknik Biomaterial

BASIC INFORMATION

Course Credit [sks]	2 / 100 minutes per Week
Course Type	Required
Course Classification	Engineering Topics
Prerequisites	Enter Prerequisite

STUDENT AND LEARNING OUTCOMES

Covered Student Outcomes

Fundamental and Engineering Knowledge (a)	**Choose Student Outcome**
Development of Engineering Solution (b)	Choose Student Outcome

Learning Outcomes

LO1 Students are able to understand Materials Science and Engineering, and Properties of Materials.

[CPMK 1: Mahasiswa mampu memahami Ilmu dan Teknik Material, Sifat-sifat material]

LO2 Students are able to understand Classes of Materials Used in Medicine and Materials Processing.

[CPMK 2: Mahasiswa mampu memahami Klas Material yang Digunakan dalam Pengobatan dan Pengolahan Material]

LO3 Students are able to understand Applications of Biomaterials

[CPMK 3: Mahasiswa mampu memahami Penerapan Biomaterial]

LO4 Students are able to apply Biomaterials in Medical Devices.

[CPMK 4: Mahasiswa mampu menerapkan Biomaterial dalam Alat Kesehatan].

COURSE DESCRIPTION

This course discusses Materials Science and Engineering, Properties of Materials, Classes of Materials Used in Medicine, Materials Processing, Applications of Biomaterials, and Biomaterials in Medical Devices.

DESKRIPSI MATAKULIAH

Matakuliah ini membahas Ilmu dan Teknik Material, Sifat-sifat material, Klas Material yang Digunakan dalam Pengobatan, Pengolahan Material, Penerapan Biomaterial, dan Biomaterial dalam Alat Kesehatan.

TOPICS

1. Materials Science and Engineering [Ilmu dan Teknik Material]
2. Properties of Materials [Sifat-sifat Material]
3. Classes of Materials Used in Medicine [Klas Material yang Digunakan dalam Pengobatan]
4. Materials Processing [Pengolahan Material]
5. Applications of Biomaterials [Penerapan Biomaterial]
6. Biomaterials in Medical Devices [Biomaterial dalam Alat Kesehatan]

REFERENCES

1. William Wagner (2020), biomaterials Science 4th Edition, Academic Press.