



# Satuan Acara Pengajaran

MMM8210852 - Komposit

Pengajar

*Prof. Dr. Ir. Anne Zulfia Syahrial, M.Sc.*

## Minggu 1

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**Materi** Pengenalan SAP  
Konsep, definisi dan klasifikasi komposit

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**Media** LCD

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**Referensi** 1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981  
2. Matthew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993

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**Aktivitas** Kuliah dan Diskusi

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## Minggu 2

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**Materi** Fiber dan matrix

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**Media** LCD

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**Referensi** 1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981  
2. Matthew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993

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**Aktivitas** Kuliah dan diskusi

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## Minggu 3

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<b>Materi</b>	Fabrikasi Komposit (MMC, CMC, PMC)
<b>Media</b>	LCD
<b>Referensi</b>	1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993
<b>Aktivitas</b>	Kuliah dan diskusi

#### Minggu 4

<b>Materi</b>	Lanjutan
<b>Media</b>	LCD
<b>Referensi</b>	1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993
<b>Aktivitas</b>	Kuliah dan presentasi

#### Minggu 5

<b>Materi</b>	Composites Interface
<b>Media</b>	LCD
<b>Referensi</b>	1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981 2. Mattew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993
<b>Aktivitas</b>	Kuliah dan diskusi

#### Minggu 6

<b>Materi</b>	Rule of mixture, Teori antar muka, pembersihan
<b>Media</b>	LCD

- Referensi**
1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
  2. Matthew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993
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**Aktivitas**      Kuliah dan diskusi

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## Minggu 7

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**Materi**          Latihan soal

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**Media**          LCD

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- Referensi**
1. Hull, D., An Introduction to composite Materials, Cambridge Uni. Press, 1981
  2. Matthew, F.L. and R.D. Rawlings, Composite Materials: Engineering and Science, Chapman Hall, 1993
  3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
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**Aktivitas**      Diskusi kelompok

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## Minggu 8

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**Materi**          Presentasi Paper

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**Media**          LCD

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**Referensi**      JOURNAL

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**Aktivitas**      Seminar dan diskusi

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## Minggu 9

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**Materi**          Nature Fiber Composites (NFC), Nanocomposites

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**Media**          LCD

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**Referensi**      Journal

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**Aktivitas**      Kuliah dan diskusi

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## Minggu 10

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<b>Materi</b>	Mekanika Komposit, aspek geometri dalam komposit
<b>Media</b>	LCD
<b>Referensi</b>	1. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999  2. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994  3. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997
<b>Aktivitas</b>	Kuliah dan diskusi

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## Minggu 11

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<b>Materi</b>	Lanjutan dan latihan soal
<b>Media</b>	LCD
<b>Referensi</b>	1. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999  2. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994  3. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997
<b>Aktivitas</b>	Kuliah

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## Minggu 12

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<b>Materi</b>	Lamina dan laminat, perilaku elastis, efek ujung serat
<b>Media</b>	LCD
<b>Referensi</b>	1. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994  2. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997
<b>Aktivitas</b>	Kuliah dan latihan soal

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## Minggu 13

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**Materi** Teori Laminat, kekuatan laminat

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**Media** LCD

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**Referensi** 1. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994  
2. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997

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**Aktivitas** Kuliah dan latihan soal

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## Minggu 14

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**Materi** Lanjutan dan Quiz

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**Media** LCD

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**Referensi** . Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994  
2. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997

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**Aktivitas** Kuliah dan diskusi

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