



Satuan Acara Pengajaran

MMM8210852 - Komposit

Pengajar

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

Minggu 1

Materi Pengenalan SAP
Konsep, definisi dan klasifikasi komposit

Media 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
3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999
4. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994
5. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997

Aktivitas Kuliah dan diskusi

Minggu 2

Materi Matrix and Reinforcement

Media 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

Minggu 3

Materi Fabrikasi Komposit (MMC, CMC, PMC)

Media 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

Minggu 4

Materi Lanjutan

Media 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

Minggu 5

Materi Composites Interface

Media 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

Minggu 6

Materi Rule of mixture (Hukum Campuran)

Media 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

 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999

Aktivitas Kuliah dan mengerjakan soal dikelas

Minggu 7

Materi Latihan Soal dan QUIZ

Media 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

 3. Bryan Harris, Engineering Composites Materials, 2nd Eddtion, Institute of Materials Communication Ltd, 1999

Aktivitas Individual work

Minggu 8

Materi Presentasi Paper

Media LCD

Referensi

Aktivitas Seminar dan diskusi

Minggu 9

Materi Nature Fiber Composites (NFC), Nanocomposites

Media LCD

Referensi Journal Komposit

Aktivitas Kuliah dan diskusi

Minggu 10

Materi Mekanika Komposit, aspek geometri dalam komposit

Media LCD

Referensi 3. Bryan Harris, Engineering Composites Materials, 2nd Edition, Institute of Materials Communication Ltd, 1999

2. Gibson R.F. Principle of Composites Materials Mechanics, Mc Graw Hill, 1994

Aktivitas Kuliah

Minggu 11

Materi Lamina dan laminat, perilaku elastis, efek ujung serat

Media LCD

Referensi 1. Gibson R.F. Principle of Composites Materials Mechanics, Mc Graw Hill, 1994

2. Kaw, Autar K, Mechanics of Composites Materials, CRC, Press, New York, 1997

Aktivitas Kuliah dan diskusi

Minggu 12

Materi Teori Laminat, kekuatan laminat

Media LCD

- 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 diskusi

Minggu 13

Materi Lanjutan, Latihan soal

Media LCD

- Referensi**
1. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994
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Aktivitas Study group

Minggu 14

Materi QUIZ

Media LCD

- Referensi**
1. Gibson R.F. Principle of Composites Materials Mecanics, Mc Graw Hill, 1994
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Aktivitas Diskusi
