

**School of Engineering**  
**READING LIST**  
**2007/8**  
**LEVEL 1**

**RECOMMENDED BOOKS FOR REFERENCE**

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**COMPUTING - (11 hours + laboratory sessions)**

For background reading & reference:

Alcock, D., *Illustrating C*, Cambridge University Press

Bramer, B. & Bramer, S., *C for Engineers*, Edward Arnold.

***The purchase of books and useful web references will be discussed at the start of the course.***

**DRAWING and CAD - (2 hours lectures + 18 hours)**

**Recommended Books:**

Simmons, C. & Maguire, D, "Manual of Engineering Drawing: To British and International Standards" publisher: Newnes, ISBN: 0750651202, 2<sup>nd</sup> Edition, 2004

Additional CAD Reading:

1. Perkins, P.E., Hands-on CAD: An Introduction to Computer Aided Draughting and Design: with Practical Assignments, Cassell, 1989.
2. Lueptow, R., Graphics Concepts with SolidWorks with CD Rom 2005, Prentice-Hall, 2005
3. Lueptow, R. & Minbiole, M., Learning SolidWorks, Pearson Education, 2003.

**ELECTRONIC FUNDAMENTALS: - (20 hours)**

**Recommended Books:**

Storey, N., *Electronics*, Prentice Hall, 2<sup>nd</sup> Edition, ISBN: 020117796X

**FLUID MECHANICS - (16 hours)**

**Recommended Books:**

Massey, B.S. and Ward, J. *Mechanics of Fluids*, Nelson Thornes,  
White, F.M. *Fluid Mechanics*, McGraw Hill,

**INTRODUCTION TO MECHANICS - (18 hours)**

**Recommended Books:**

Benham, P.P., Crawford, R.J. and Armstrong, C.G., *Mechanics of Engineering Materials*, 2nd Edition, Longman, 1996, ISBN 0-582-25164-8

**MANUFACTURE - (11 hours)**

**Recommended Books:****For reference**

Manufacturing with Materials, Edwards & Endean  
Micro Electronic Processing, Ruska

**MATHEMATICS FOR ENGINEERS AND SCIENTISTS - (60 hours)**

For reference:

A Croft, R. Davison and M. Hargreaves, *Engineering Mathematics*, Addison-Wesley.

M. R. Spiegel, *Advanced Calculus*, Schaum

M. R. Spiegel, *Vector Analysis*, Schaum.

**STRESS ANALYSIS - (12 hours)**

- Benham, P.P., Crawford, R.J., and Armstrong, C.G., *Mechanics of Engineering Materials*, Longman, 2<sup>nd</sup> Edition

OR

- Hearn, E.J., *Mechanics of Materials 1*, Butterworth Heinemann, 3<sup>rd</sup> Edition

**STRUCTURES - (12 hours)****Recommended books:**

Benham, P.P, Crawford, R.J. and Armstrong, C.G. , *Mechanics of Engineering Materials*, 3Rev Ed edition (1996), Prentice-Hall (Durham Library shelfmark 539.3/.5 BEN).

Case, J., Chilver, A.H. & Ross, C.T.F. *Strength of Materials and Structures*, Butterworth-Heinemann Ltd; 4Rev Ed edition (27 Aug 1999). (Durham Library shelfmark 620.17 CAS.2)

Gere, J.M. *Mechanics of Materials*, Brooks Cole; 5Rev Ed edition (7 Jun 2000) (Durham Library shelfmark 539.3/.5 GER)

You will find many other books covering the topics in this course at the shelfmarks of the books recommended above.