UNIVERSITY OF CANTERBURY - COLLEGE OF ENGINEERING

DEPARTMENT OF MATHEMATICS AND STATISTICS

# MATH381-09S2(C)

# ADVANCED SCIENTIFIC COMPUTATION

**2009 - SEMESTER 2**

## COURSE TEXTBOOKS/REFERENCES

**RECOMMENDED:**

**Numerical Methods for Engineers**
by **Steven C. Chapra & Raymond P. Canale,**
published by **McGraw-Hill - 4th or 5th ed 2002/2005.**
EMTH/MATH271 textbook

**MATLAB: Programming for Engineers**
by **Stephen J. Chapman**
published by **Brooks-Cole - 3rd ed 2005**
Recommended for all courses

**OTHER REFERENCES:**

**Numerical Analysis**
by **R.L. Burden & J.D. Faires**
published by **Thomson - various ed to 8th 2005**

**Numerical Analysis: Mathematics of Scientific Computing**
by **D. Kincaid & W. Cheney**
published by **Brooks/Cole - 3rd ed. 2002**

**Numerical Computing with MATLAB**
by **Cleve B. Moler**
published by **SIAM - 2004**

**Solving ODEs with MATLAB**
by **L. F. Shampine, I. Gladwell, and S. Thompson**
published by **Cambridge University Press - 2003**

**Numerical Solution of Partial Differential Equations**
by **K. W. Morton and D. F. Mayers**
published by **Cambridge University Press - 2nd ed. 2005**

**Mastering MATLAB 6 & 7: A Comprehensive Tutorial and Reference**
by **D. Hanselman & B. Littlefield**
published by **Prentice-Hall - 2001/5**

**Getting Started with MATLAB 7**
by **R. Pratap**
published by **Oxford University Press - 2005**

**A Guide to Matlab for Beginners and Experienced Users**
by **B.R. Hunt; R.L. Lipsman; J.M. Rosenberg**
published by **Cambridge University Press - 2001**