

ME280A - Introduction to the Finite Element Method

SELECTED BIBLIOGRAPHY

I. Engineering texts

- [1] J.H. Argyris and S. Kelsey. *Energy Theorems and Structural Analysis*. Butterworths, London, 1960. Reprinted from a series of articles in *Aircraft Engr.* , 1954-55. [TL570.A7]
- [2] J.T. Oden. *Finite Elements of Nonlinear Continua*. McGraw-Hill, New York, 1971. [QA808.2.0331]
- [3] C.S. Desai and J.F. Abel. *Introduction to the Finite Element Method*. Van Nostrand Reinhold, New York, 1972. [TA640.2.D481]
- [4] R.H. Gallagher. *Finite Element Analysis Fundamentals*. Prentice-Hall, Englewood Cliffs, 1975. [TA646.G33]
- [5] K.-J. Bathe and E.L. Wilson. *Numerical Methods in Finite Element Analysis*. Prentice-Hall, Englewood-Cliffs, 1976. [TA347.F5B371]
- [6] E. Hinton and D.R.J. Owen. *An Introduction to Finite Element Computations*. Pineridge, Swansea, 1979. [TA347.F5.H57]
- [7] A.J. Davies. *The Finite Element Method: a First Approach*. Oxford, New York, 1980. [TA347.F5.D38]
- [8] B. Irons and S. Ahmad. *Techniques of Finite Elements*. Ellis Horwood, New York, 1980. [TA347.F5.I761]
- [9] E.B. Becker, G.F. Carey, and J.T. Oden. *Finite Elements: an Introduction*, volume I. Prentice-Hall, Englewood-Cliffs, 1981. [TA347.F5.B4](R)
- [10] A.J. Baker. *Finite Element Computational Fluid Mechanics*. Hemisphere, Washington, 1983. [TA357.B27]
- [11] G.F. Carey and J.T. Oden. *Finite Elements: a Second Course*, volume II. Prentice-Hall, Englewood Cliffs, 1983. [TA347.F5.B4](R)
- [12] B. Irons and N. Shrive. *Finite Element Primer*. Ellis Horwood, Chichester, 1983. [TA347.F5.I75]
- [13] O.C. Zienkiewicz and K. Morgan. *Finite Elements and Approximation*. Wiley, New York, 1983. [QA297.5.Z53]
- [14] G.F. Carey and J.T. Oden. *Finite Elements: Computational Aspects*, volume III. Prentice-Hall, Englewood Cliffs, 1984. [TA347.F5.B4](R)
- [15] J.T. Oden and G.F. Carey. *Finite Elements: Special Problems in Solid Mechanics*, volume V. Prentice-Hall, Englewood Cliffs, 1984. [TA347.F5.B4]

-
- [16] N. Kikuchi. *Finite Element Methods in Mechanics*. Cambridge, New York, 1986. [TA347.F5.K551]
- [17] D.S. Burnett. *Finite Element Analysis: from Concepts to Applications*. Addison-Wesley, Reading, 1987. [TA347.F5.B87]
- [18] T.J.R. Hughes. *The Finite Element Method; Linear Static and Dynamic Finite Element Analysis*. Prentice-Hall, Englewood Cliffs, 1987. [TA347.F5.H841](R)
- [19] H.R. Schwartz. *Finite Element Methods*. Academic Press, London, 1988. [TA347.F5.S3813]
- [20] R.D. Cook, D.S. Malkus, and M.E. Plesha. *Concepts and Applications of Finite Element Analysis*. John Wiley, New York, 3rd edition, 1989. [TA646.C66]
- [21] O. Pironneau. *Finite Element Method for Fluids*. Wiley, New York, 1989. [TA357.P625]
- [22] S.S. Rao. *The Finite Element Method in Engineering*. Pergamon Press, Oxford, 2nd edition, 1989. [TA347.F5.R361]
- [23] R.J. Melosh. *Structural Engineering Analysis by Finite Elements*. Prentice-Hall, Englewood Cliffs, 1990. [TA645.M45]
- [24] Y.K. Cheung. *Finite Element Methods in Dynamics*. Kluwer, New York, 1991. [TA654.C5215]
- [25] P.E. Lewis and J.P. Ward. *The Finite Element Method: Principles and Applications*. Addison-Wesley, Wokingham, 1991. [QA379.L49]
- [26] B.A. Szabo and I. Babuška. *Finite Element Analysis*. Wiley, New York, 1991. [TA347.F5.S98]
- [27] O.C. Zienkiewicz and R.L. Taylor. *The Finite Element Method; Solid and Fluid Mechanics, Dynamics and Non-linearity*, volume 2. McGraw-Hill, London, 4th edition, 1991. [TA640.2.Z5]
- [28] N. Ottosen and H. Peterson. *Introduction to the Finite Element Method*. Prentice-Hall, London, 1992. [TA347.F5.O88]
- [29] J.N. Reddy and D.K. Gartling. *The Finite Element Method in Heat Transfer and Fluid Dynamics*. CRC Press, Boca Raton, 1993. [TA357.R43 1994]
- [30] G.R. Buchanan. *Schaum's Outline of Theory and Problems of Finite Element Analysis*. McGraw-Hill, New York, 1995. [TA347.F5.B83]
- [31] K.-J. Bathe. *Finite Element Procedures*. Prentice-Hall, Englewood-Cliffs, 1996. [TA347.F5.B36]
- [32] T. Belytschko, W.-K. Liu, and B. Moran. *Nonlinear Finite Elements for Continua and Structures*. John Wiley, Chichester, 2000. [TA347.F5.B46]

-
- [33] K.H. Huebner, D.L. Dewhurst, D.E. Smith, and T.G. Byrom. *The Finite Element Method for Engineers*. Wiley, New York, 4rd edition, 2001. [TA347.F5.H83](R)
- [34] O.C. Zienkiewicz, R.L. Taylor, and J.Z. Zhu. *The Finite Element Method; Its Basis and Fundamentals*. Elsevier, Oxford, 6th edition, 2005. [TA640.2.Z52](R)
- [35] J.N. Reddy. *An Introduction to the Finite Element Method*. McGraw-Hill, New York, 3rd edition, 2006. [TA347.F5.R4](R)

II. Mathematical texts

- [1] G. Strang and G.J. Fix. *An Analysis of the Finite Element Method*. Prentice-Hall, Englewood Cliffs, 1973. [TA335.S771](R)
- [2] J.T. Oden and J.N. Reddy. *An Introduction to the Mathematical Theory of the Finite Elements*. Academic Press, New York, 1978. [QA379.O31]
- [3] P.G. Ciarlet. *The Finite Element Method for Elliptic Problems*. North-Holland, Amsterdam, 1980. [QA377.C53]
- [4] J.T. Oden and G.F. Carey. *Finite Elements: Mathematical Aspects*, volume IV. Prentice-Hall, Englewood Cliffs, 1984. [TA347.F5.B4](R)
- [5] V. Girault and P.-A. Raviart. *Finite Element Methods for Navier-Stokes Equations: Theory and Algorithms*. Springer, Berlin, 1986. [QA929.G771]
- [6] C. Johnson. *Numerical Solution of Partial Differential Equations by the Finite Element Method*. Cambridge University Press, Lund, 1990. [TA347.F5.J621](R)
- [7] A. Zenisek. *Nonlinear Elliptic and Evolution Problems and Their Finite Element Approximation*. Academic Press, London, 1990. [QC20.7.F56.Z4]
- [8] F. Brezzi and M. Fortin. *Mixed and Hybrid Finite Element Methods*. Springer, New York, 1991. [TA347.F5.F68]
- [9] P.G. Ciarlet and J.L. Lions, editors. *Finite Element Methods (Part 1)*, volume II of *Handbook of Numerical Analysis*. North-Holland, Amsterdam, 1991. [QA297.H287]
- [10] S.C. Brenner and L.R. Scott. *The Mathematical Theory of Finite Element Methods*. Springer, New York, 1994. [QA379.B74]
- [11] D. Braess. *Finite Elements: Theory, Fast Solvers, and Applications in Solid Mechanics*. Cambridge University Press, Cambridge, 2nd edition, 2001. [TA347.F5.B7313](R)

Note: (R) indicates that the book is on 1-day reserve in the Engineering Library.