

List of Recommended Textbooks (Part Time Programme):

❖ Mechanical Engineering (core courses)

❖ Specializations (major prescribed electives)

Note: Students are advised to check with Course Coordinator/Lecturer for the latest updates of Textbooks/References

FE1012 Physics A

- R A Serway and J W Jewett Jr, Physics for Scientists and Engineers, 8th Edition, Brooks Cole
- Randall D. Knight, Brian Jones, and Stuart Field, College Physics: A Strategic Approach, Addison Wesley

MA0100 Environmental Sustainability

- NIL

MA0101 Singapore Studies

- Introduction to Engineering Ethics, 2nd Edition, McGraw Hill, 2010

MA1001 Dynamics

- Chen, G. and Yap, F. F., An Introduction to Planar Dynamics, third edition, Thomson Learning, 2003

MA1002 Fundamental Engineering Materials

- William D. Callister, David G. Rethwisch, "Materials Science and Engineering – An Introduction" 8th Edition, John Wiley and Sons, 2011

MA1003 Essential Mathematics

- Thomas Finney, Calculus, 9th edition, Addison Wesley, 1996
- Erwin Kreyszig, Advanced Engineering Mathematics, 8th edition, John Wiley and Sons, 1999

MA2001 Mechanics of Materials

- Beer, F.P., Johnston, E.R. and DeWolf, J.T., Mechanics of Materials, 5th Ed, SI Units, McGraw-Hill, 2009

MA2002 Theory of Mechanism

- Wilson, CE, Sadler, JP, Kinematics and Dynamics of Machinery, 3rd Edition in SI units, Prentice-Hall, 2003

MA2003 Introduction to Thermo-fluids

- Yunus A. Cengel and Michael A. Boles. Thermodynamics: An Engineering Approach, 7th Edition, McGraw-Hill, NY, 2010
- Munson, B R, Young, D F, Okiishi, T H, and Huebsch, W W, Fundamentals of Fluid Mechanics, 6th Edition, John Wiley, 2010

MA2004 Manufacturing Processes

- Groover Mikell P, Principles of modern manufacturing. 4th ed. SI version. John Wiley, 2011

MA2005 Engineering Graphics

- Jensen C, Hesel J.D and Short D.R, Engineering Drawing & Design, Seventh Edition, McGraw-Hill, New York, 2008

MA2006 Engineering Mathematics

- Erwin Kreyszig, Advanced Engineering Mathematics, 9th Edition, Wiley & Sons

MA2007 Thermodynamics

- Yunus A. Cengel and Michael A. Boles. Thermodynamics: An Engineering Approach, 6th Edition, McGraw-Hill, NY, 2007, ISBN 978-007-125771-8

MA2009 Introduction to Electrical Circuits & Electronic Devices

- Rizzoni, Giorgio, Principles and applications of Electrical Engineering, McGraw Hill, 5th Edition, 2005

MA2071 Laboratory Experiments

- NIL

MA3001 Machine Design

- Machine Elements in Mechanical Design, Robert Mott, Pearson, 2006

MA3002 Solid Mechanics and Vibration

- Benham, P.P, Crawford, R.J. and Armstrong, C.G. Mechanics of Engineering Materials. 2nd edition. Pearson Prentice Hall, 1996.
- David Hutton, Fundamentals of Finite Element Analysis (1st ed.), Mc Graw Hill, 2004.
- Steidel, R. F., An Introduction to Mechanical Vibrations, 3rd Edition, John Wiley, 1989.

MA3003 Heat Transfer

- Çengel, Y.A. and Ghajar , A.J., Heat and Mass Transfer: Fundamentals and Applications, 4th Edition (SI Units), McGraw-Hill, 2011

MA3004 Mathematical Methods in Engineering

- Kreyszig E, Advanced Engineering Mathematics, 8th or 9th edition, John Wiley & Sons.
- David Hutton, Fundamentals of Finite Element Analysis (1st ed.), Mc Graw Hill, 2004.
- Versteeg and Malalasekera, An Introduction to Computational Fluid Dynamics: The Finite Volume Method (2nd ed.), Pearson.

MA3005 Control Theory

- Ogata, K, Modern Control Engineering, 4th Edition, Prentice Hall, 2002 (International Edition)

MA3006 Fluid Mechanics

- Munson, B R, Young, D F and Okiishi, T H, Fundamentals of Fluid Mechanics, 5th Edition, John Wiley, 2006

MA3071 Mechanical Experiments

- NIL

MA4001 Engineering Design

- Fluid Power with applications by Anthony Esposito,6th edition, Prentice Hall, 2003
- Pahl, G & Beitz, W, Engineering Design - A Systematic Approach, 2nd Edition, Springer, 1996

MA4002 Fluid Dynamics

- Munson, BR, Young, DF, Okiishi,TH & Huebsch WW, Fundamentals of Fluid Mechanics, 6th Edition, John Wiley & Sons, 2010

MA4003 Materials and Process Selection in Design

- Michael F. Ashby “Materials Selection in Mechanical Design”, 4th Edition, Elsevier Publications, 2010
- Michael F. Ashby and David R. H. Jones, “Engineering Materials 1: An Introduction to their Properties and Applications”, 2nd Edition, Butterworth Heinemann, 2000

MA4079 Final Year Project

- NIL

MA4804 Optimization Theory and Applications

- Rao, S.S. (2009) Engineering Optimization : Theory and Practice, 4th Ed., Wiley

MA4831 Computer-aided Engineering

- Principles of CAD/CAM/CAE Systems, by Kunwoo Lee. Pearson/Addison Wesley, 1999

MA4837 Net Shape Manufacturing

- NIL

MA4838 Non-conventional Manufacturing Processes

- Fundamentals of machining processes: Conventional and Nonconventional Processes, Taylor &Francis, Hassan El-Hofy, 2007

MA4839 Precision Manufacturing

- Dornfeld, D., and Lee, D. E., Precision Manufacturing, Springer, 2008

MA4842 Metrology

- D.L Butler &.V.M. Murukeshan, Metrology for Engineers, intended publication date: early 2011

MA4843 Management of Product Development

- Smith, P.G. & Reinertsen, D.G., Developing Products in Half the Time: New Rules, New Tools, John Wiley, 1998
- Trott. P., Innovative Management of New Product Development. 4 ed. Prentice Hall, 2008
- Crawford, C.A. & Benedetto., C.A.D., New Products Management. 9th ed. McGraw Hill, 2008

MA4844 Industrial Design

- NIL

MA4845 Prototyping and CAM

- Chua, CK, Leong, KF & Lim CS, Rapid prototyping: Principles and Applications, 3rd Edition, World Scientific, 2009

MA4846 Product Design Engineering

- Erhard G., Designing with Plastics, Hanser Gardner Publications, 2006
- Boljanovic V., Sheet Metal Forming Process and Die Design, Industrial Press Inc., 2004

MA4847 Human Factors Engineering

- A Guide to Human Factors and Ergonomics, Martin Helander, 2nd Edition, Taylor & Francis

MA4850 Supply Chain and Logistics Management

- Simchi-Levi, D., Kaminsky, P. and E. Simchi-Levi, Designing and Managing the Supply Chain, McGraw Hill International Edition, 3rd edition, 2008

MA4853 Manufacturing Systems

- Manufacturing Organization And Management, 6/E Harold T Amrine, John A. Ritchey, Colin L. Moodie, Joseph F Kmec (Prentice Hall, 6th Edition) ISBN-10: 0135548586

MA4854 Quality Assurance and Management

- Amitava Mitra, Fundamentals of Quality Control and Improvement 3rd ed., Prentice Hall, 2008

MA8103 Human Resource Management

- Hodgetts RM, (latest edition), Modern Human Relations at Work, The Dryden Press for HRM