

School of Mechanical Engineering

Reading List for 2000 / 01 Modules:

MECH 1110: Mechanics of Materials 1

Mechanics of Engineering Materials (2nd Edition) PP Benham, RJ Crawford & CG Armstrong, LONGMAN, 1996.

Mechanics of Materials (2nd Edition) (SI Units) FP Beer and ER Johnston, MCGRAW HILL, 1992.

Mechanics of Materials (3rd Edition) J.M. Gere & S.P. Timoshenko, CHAPMAN & HALL, 1991.

Engineering Mechanics – Statics (6th Edition) RC Hibbeler, MACMILLAN, 1989.

Strength of Materials and Structures (3rd Edition) J Case, L Chilver and CFT Ross, EDWARD ARNOLD, 1993.

MECH 1120: Dynamics

Principles of Dynamics J Grosjean, STANLEY THORNES, 1986.

Dynamics GE Drabble, FOUNDATIONS OF ENGINEERING SERIES, MACMILLAN, 1990.

Mechanics of Machines. Doughtey, WILEY, 1988.

Either:

Dynamics (Engineering Mechanics) Bedford & Fowler, ADDISON WESLEY, 1995

Or:

Dynamics (Engineering Mechanics) Riley & Sturges, WILEY, 1993.

MECH 1140; Introduction to Mechatronics

No books are essential for this course. However the following books are recommended:

Integrated electrical and electronic engineering for mechanical engineers C Fraser, J Milne, McGraw-Hill, 1994.

Mechatronics: electronic control systems in mechanical engineering W Bolton, Addison Wesley Longman, 1999.

Additional useful books which are in the Edward Boyle library are:

Robotic Engineering: An integrated approach D Klafter, T A Chmielewski, M Negin, PRENTICE-HALL, 1989.

Basic control system technology C J Chesmond, (Classmark: Electrical engineering Z-23) *or* **Control system technology** C J Chesmond (Classmark: Chemical engineering O-7)

Introduction to control system technology R Bateson (Classmark: Electrical engineering Z-2)

MECH 1160: Mechatronics

Integrated electrical and electronic engineering for mechanical engineers C Fraser, J Milne (1994) MCGRAW-HILL.

Mechatronics: Electronic Control Systems in Mechanical Engineering (2nd Edition) W Bolton (1999) Published by ADDISON-WESLEY-LONGMAN.

Hughes Electrical Technology (7th Edition) Revised by I McKenzie-Smith. LONGMAN SCIENTIFIC & TECHNICAL, 1995.

MECH 1250: Introduction to fluid Mechanics

Mechanics of Fluids (5th Edition) (S.I. Units). B.S. Massey, VAN NOSTRAND REINHOLD, 1983.

Fluid Mechanics (3rd edition) Douglas, Gasioreti & Swafield, LONGMAN, 1994.

Fluid Mechanics Foundation Engineering Series, Widdien, McMILLAN PRESS, 1996.

Thermofluids Sherwin & Horsley, CHAPMAN & HALL, 1996.

MECH 1260: Engineering Thermodynamics

Fundamentals of Classical Thermodynamics S.I. Edition. GJ Van Wylen, RE Sonntag & E Borgankke, WILEY, 1994. (associated software on PC net).

Thermodynamics - An Engineering Approach (2nd Edition) Y A Cengel & M A Boles, MCGRAW HILL, 1994.

Basic Engineering Thermodynamics. P B Whalley.

Thermodynamics & Transport Properties (Including CATT software) C Borgnakke & RE Sontag, Wiley 1997

MECH 1350: Introduction to Manufacturing (EA1)

Manufacturing Engineering and Technology (3rd Edition) S Kalpakjian, ADDISON WESLEY, 1995. ISBN 0-201-84552-0

MECH 1355: Mechatronics Engineering Applications

Manufacturing Engineering and Technology (3rd Edition) S Kalpakjian, ADDISON WESLEY, 1995. ISBN 0-201-84552-0

MECH 1356: Introduction to Automotive Manufacturing (EA1)

Manufacturing Engineering and Technology (3rd Edition) S Kalpakjian, ADDISON WESLEY, 1995. ISBN 0-201-84552-0

MECH 1360: Introduction to Engineering Design

Principles of Engineering Drawing LG Lamit and KL Kitto, WEST PUBLISHING COMPANY, 1994. ISBN 0-134-02805-6

Engineering Design: A Systematic Approach G Pahl and W Beitz, DESIGN COUNCIL, 1988. ISBN 0-85072-239-X

Product Design: Fundamentals and Methods NFM Roozenburg and J Eekles, WILEY, 1995. ISBN 0-471-95465-9

Manufacturing Engineering and Technology (3rd Edition) S Kalpakjian, ADDISON WESLEY, 1995. ISBN 0-201-84552-0

MECH 1365: Introduction to Automotive Engineering Design

Principles of Engineering Drawing LG Lamit and KL Kitto, WEST PUBLISHING COMPANY, 1994. ISBN 0-134-02805-6

Engineering Design: A Systematic Approach G Pahl and W Beitz, DESIGN COUNCIL, 1988. ISBN 0-85072-239-X

Product Design: Fundamentals and Methods NFM Roozenburg and J Eekles, WILEY, 1995. ISBN 0-471-95465-9

Manufacturing Engineering and Technology (3rd Edition) S Kalpakjian, ADDISON WESLEY, 1995. ISBN 0-201-84552-0

MECH 1430: Engineering Materials 1

Engineering Materials 1 - An Introduction to their Properties and Applications MF Ashby & DRH. Jones, PERGAMON, 1980.

MECH 1530: Mathematical Methods for Mechanical Engineers

Modern Engineering Mathematics. G James, ADDISON-WESLEY.

MECH 1540: Mathematical Techniques for Mechanical Engineers

Modern Engineering Mathematics, G James, ADDISON-WESLEY.

MECH 1550: Computers in Engineering

None

MECH 1620: Study & Communication Skills (Virtual Module)

Successful Study for Degrees (2nd Edition) R Barnes, ROUTLEDGE, 1995, ISBN 0-415-12741-6

Improving Study Skills: A Competence Approach C Lashley, CASELL, 1995, ISBN 0-304-33336-0

Recommended for Purchase:

500 Tips for Students Phil Race, Blackwell, 1996., ISBN 0-631-18851-7

MECH 2110: Mechanics of Materials 2

Either:

Mechanics of Materials (2nd Edition) JM Gere & SP Timoshenko, WADSWORTH INTERNATIONAL, 1985.

or (not both)

Mechanics of Engineering Materials (2nd Edition) PP Benham, RJ Crawford & CG Armstrong, LONGMAN, 1996.

MECH 2140: Actuator Systems

Integrated electrical and electronic engineering for mechanical engineers C Fraser, J Milne, MCGRAW-HILL, 1994.

Mechatronics DA Bradley, D Dawson, NC Burd, A J Loader, CHAPMAN & HALL, 1991.

Robotic Engineering: An integrated approach RD Klafner, TA Chmielewski, M Negin, PRENTICE-HALL, 1989.

MECH 2150: Machine Intelligence

Mathematical methods for AI and Autonomous Systems ER Dougherty, CR Giardina, PRENTICE-HALL, 1988.

Neural Network Architectures JE Dayhoff, VAN NORSTRAND REINHOLD, 1990.

MECH 2170: Vibration & Control

Mechanical Vibrations (3rd Edition) S S Rao, ADDISON WESLEY, 1995, ISBN 0-2-159289-4.

Essentials of Control J Schwarzenbach, ADDISON WESLEY LONGMAN, 1996, ISBN 0-582-27347-1.

MECH 2260: Thermodynamic Cycles

Fundamentals of thermodynamics (5th Edition) RE Sonntag, C Borgnakke & GJ Van Wylen, JOHN WILEY & SONS INC, 1998.

Applications of thermodynamics (2nd Edition) BD Wood, ADDISON-WESLEY, 1982.

Gas Turbine Theory (4th Edition) (Chapters 1-3) H Cohen, GFC Rogers HIH Saravanamuttoo, ADDISON WESLEY LONGMAN LTD, 1998, ISBN0-582-23632-0.

MECH 2265: Automotive Power Cycles

Fundamentals of Classical Thermodynamics (4th Edition) G Van Wylen, RE Sonntag and C Borgnakke, WILEY 1994.

Thermodynamics an Engineering Approach (2nd Edition) YA Cengel & MA Boles, MCGRAW HILL, 1994.

Thermodynamic Analysis of Combustion Engines A Campbell, WILEY.

Thermodynamic & Transport Properties (Includes CATT software), C Borgnakke & RE Santag, WILEY 1997

MECH 2270: Engineering Fluid Mechanics

Introduction to Fluid Dynamics (4th Edition) RW Fox & AT McDonald, JOHN WILEY & SONS, ISBN 0-471-54852-9.

MECH 2280: Heat & Mass Transfer

Fundamentals of heat and mass transfer Incropera and DeWitt, New York, JOHN WILEY & SONS 1990.

MECH2330: Embodiment Design

Engineering Design: A systematic approach G Pahl and W Beitz, 1995, THE DESIGN COUNCIL.

Mechanical Design, Peter RN Childs, 1998, ARNOLD.

MECH 2335: Embodiment Design (Automotive)

Engineering Design: A systematic approach G Pahl and W Beitz, 1995, THE DESIGN COUNCIL.

Mechanical Design, Peter RN Childs, 1998, ARNOLD.

MECH 2340: Detail Design & Manufacturing Planning

Recommended For Purchase:

Manufacturing Engineering and Technology (3rd Edition) Kalpakjian, ADDISON WESLEY.

Background Reading:

Automation, Production Systems and Computer Integrated Manufacturing Groover, PRENTICE HALL INTERNATIONAL

CADCAM: From Principles to Practice McMahon & Browne, ADDISON WESLEY.

MECH 2345: Detail Design & Manufacturing Planning (Automotive)

Recommended For Purchase:

Manufacturing Engineering and Technology (3rd Edition) Kalpakjian, ADDISON WESLEY.

Background Reading:

Automation, Production Systems and Computer Integrated Manufacturing Groover, PRENTICE HALL INTERNATIONAL

CADCAM: From Principles to Practice McMahon & Browne, ADDISON WESLEY.

MECH 2410: Engineering Materials 2

Engineering Materials - 1 MF Ashby & DRH Jones, PERGAMON, 1986.

Engineering Materials - 2 MF Ashby & DRH Jones, PERGAMON, 1986.

MECH 2530: Software Engineering & Process Measurement

Statistics for Technology: A course in applied statistics Chris Chatfield, CHAPMAN & HALL, Paperback © 1983 ISBN/ISSN: 0-412-25340-2, Price: UK £16.99

Statistics In Engineering: A practical approach AV Metcalfe, CHAPMAN & HALL, Paperback © 1994 ISBN/ISSN: 0-412-49220-2, Price: UK £22.50

Quantitative Data Analysis with SPSS for Windows Alan Bryman, Duncan Cramer, ROUTLEDGE Paperback © 1997 ISBN/ISSN: 0-415-14720-4, Price: UK £15.99

MECH 2540: Engineering Mathematics

Mathematical Methods for Science Students (2nd Edition) G Stephenson, LONGHAM, 1973.

Advanced Engineering Mathematics PV O'Neil, WILEY, 1983.

Statistics for the Engineering and Computer Sciences (2nd Edition) W Mendenhall & T Sincich, DELLEN / MACMILLAN, 1988.

Statistics: Problems and Solutions EE Bassett, JM Bremner, IT Jolliffe et al, ARNOLD, 1986.

Advanced Modern Engineering Mathematics (2nd Edition) Glyn James, ADDISON-WESLEY, 1999

MECH 3125: Digital Control

Using MatLab, Simulink & Control Systems Toolbox, the Math Works Inc. PRENTICE HALL, 1996

Modern Control Systems (8th Edition) RC Dorf, RH Bishop. ADDISON WESLEY, 1998

Digital Control of Dynamic Systems (3rd Edition), GF Franklin, JD Powell and M Workman. ADDISON WESLEY, 1998

The Art of Control Engineering K Dutton, S Thompson and B Barraclough. ADDISON WESLEY, 1997

MECH 3135: Dynamics & Control

Mechanical Vibrations (3rd Edition) SS Rao, ADDISON WESLEY, 1995, ISBN 0-2-159289-4

Essentials of Control J Schwarzenbach ADDISON WESLEY LONGMAN, 1996, ISBN 0-582-27347-1

MECH 3155: Finite Element Analysis Techniques

Finite element analysis theory and practice MJ Fagan, LONGMAN, 1996

Using finite elements in mechanical design Mottram & Shaw, McGRAW HILL, 1996

The finite element method: Principles and applications Lewis and Ward, LONGMAN, 1992

MECH 3160: Robotics

No books are essential for this course. However the following books are recommended:

Robotics K S Fu, RC Gonzalez & CSG Lee, McGRAW-HILL, 1987

Robot Manipulators RP Paul, MIT PRESS, 1981

Robotic Engineering: An integrated approach RD Klafter, TA Chmielewski, M Negin, PRENTICE-HALL, 1989

Introduction to Robotics J J Craig, ADDISON-WESLEY, 1986

Engineering Foundations of Robotics FN Nagy & A Siegler, PRENTICE-HALL, 1987

Computer Vision for Robotic Systems MC Fairhurst, PRENTICE-HALL, 1988

MECH 3165: Vehicle Design & Analysis

Fundamental of vehicle dynamics TD Gillsepie, SAE, 1992

Road vehicle performance GG Lucas, GORDON & BREACH, 1986

Brake design and safety R Limpert, SAE, 1992

MECH 3180: Vehicle Dynamics

An introduction to Vehicle Dynamics DA Crolla, GR Firth & DNL Horton, UNIVERSITY OF LEEDS, 1992
(copies from lecturer and in the Departmental Library)

Tyres, Suspension and Handling JC Dixon, CAMBRIDGE UNIVERSITY PRESS, 1991

Funamentals of Vehicle Dynamics TD Gillespie, SAE, 1992

Vehicle Handling Dynamics JR Ellis, MECHANICAL ENGINEERING PUBLICATIONS, 1994

The Motor Vehicle (11th Edition) K Newton, W Steeds & TK Garret, BUTTERWORTHS, 1989

Advanced Vehicle Technology H Heisler, EDWARD ARNOLD, 1989

Automotive Handbook (3rd Edition) R BOSCH GmbH, STUTTGART, 1993 (sold under license by SAE)

MECH 3210: Turbomachinery & Compressible Flow

Mechanics of Fluids (6th Edition) (S. I. Units) BS Massey, CHAPMAN & HALL, 1989

Fluid Mechanics (3rd Edition) Douglas, Gasiorek, Swaffield, LONGMAN SCIENTIFIC & TECHNICAL, 1995

MECH 3230: Engineering Computational Fluid Dynamics

Computational Fluid Dynamics PJ Rourke, HERMOSA PUBLISHERS

Numerical Computation of Internal and External Flows (volume 1) C Hirsch, 1989

Fundamentals of Numrical Discretisation WILEY

MECH 3250: Biomedical Engineering

An Introduction to the Bio-Mechanics of Joints and Joint Replacements D Dowson & V Wright, REACH, 1977

Biomaterials in Orthopaedic Research and Practice J Black, CHURCHILL LIVINGSTONE, Edinburgh, 1988

Basic Clinical Physiology J M Green, OXFORD UNIVERSITY PRESS

Basic Biomechanics Musclop Skeletal System M Nordin & VH Frankel, LEA & FEBIGER, 1989

MECH 3280: Principles of Tribology

***Engineering Tribology** JA Williams, OXFORD SCIENCE PUBLICATIONS, OUP, 1994

The History of Tribology (2nd Edition) D Dowson, MEP, 1998

Principles of Tribology J Halling, MACMILLAN, 1978

Friction and Wear of Materials (2nd Edition) E Rabinowicz, JOHN WILEY & SONS, 1995

Tribology: Friction and Wear of Engineering Materials IM Hutchings, EDWARD ARNOLD LTD, 1992

Basic Lubrication Theory A Cameron, LONGMANS, 1983

Chemistry and Technology of Lubricants (2nd Edition) RM Mortier and ST Orszulik, BLACKIE ACADEMIC and PROFESSIONAL, 1997

***Recommended for purchase**

MECH 3290: Combustion, Energy & Environment

Energy and the Atmosphere (2nd Edition) IM Campbell, WILEY, 1986

Fuels Paradise. P Chapman, PENGUIN, 1975. *Out of print, available in library*

Cogeneration: Combined Heat and Power Thermodynamics and Economics. J H Horlock, PERGAMON, 1992

The Elements of Nuclear Power DJ Bennet & JR Thomson, LONGMAN SCIENCE & TECHNICAL, 1989

Applications of Thermodynamics (2nd Edition) BD Wood, ADDISON WESLEY, 1982.

MECH 3330: CAE Systems for Design & Manufacture

Engineering Design: A Systematic Approach (2nd Edition) Pahl and W Beitz, SPRINGER, 1996

CADCAM: from principles to practice (1st Edition) Chris McMahon and Jimmie Browne, ADDISON-WESLEY, 1993

MECH 3340: Concurrent Engineering & Team Design

None

MECH 3350: Automotive Engineering & Team Design

None

MECH 3410: Introduction to Surface Engineering

A Guide to Surface Engineering Terminology E Tyrkiel and PA Dearnley (eds), The Institute of Materials, London, 1995

ASM Handbook Volume 18, "Friction, Lubrication and Wear Technology ASM International, Materials Park, OH, 1992

Surface Engineering, A journal of "The Institute of Materials, London, since 1985

Tribology IM Hutchings, Edward Arnold, 1992

MECH 3600: Professional Studies

The Mechanical Design Process (2nd edition) DG Ullman, McGRAW-HILL. ISBN 0-07-065756-4

Management of Design. Engineering and Management Perspectives Sriram Dasu and Charles Eastman. KLINVER ACADEMIC PUBLISHERS, 1994. ISBN 0-7923-9509-3

Manufacturing Strategy Process and content CA Voss, CHAPMAN & HALL, 1992. ISBN 0-412-43660-4 (HB). ISBN 0-412-63480-5 (PB)

The New Manufacturing Engineer. Coming of Age in an Agile Environment MJ Termini, Society of Manufacturing Engineers, 1996. ISBN 0-87263-479-5

Re-engineering for Sustainable Industrial Production Proc, Lisbon, Portugal, May 1997, LM Camarinha-Matos. CHAPMAN & HALL, 1997. ISBN 0-412-79950-2

Invited Talk Business Process & Shop Floor Re-Engineering. G Doumeingts & N Malhene, email doumeingts@lap.u-bordeaux.fr

Business Process Modelling: Comparing IDEF3 and CIMOSA F B Vernadat, email vernadat@poncelet.univ-metz.fr

Business & Marketing for Engineers and Scientists. Tony Curtis. McGRAW HILL , 1994

Plus other lists given out in Lectures by individual specialists.

MECH 3810: Professional Project Level 3

None

MECH 3815: Engineering Project (Ordinary)

None

MECH 3885: International Industry

None

MECH 3950: Computer Integrated Manufacturing

An introduction to Database Systems CJ Date

CADCAM – From principles to practice C McMahon & J Browne

An introduction to STEP Jon Owen

Information Modelling the EXPRESS way Douglas Schenk & Peter Wilson

MECH 3960: Manufacturing Processes

Process Selection KG Swift & JD Booker, ARNOLD.

Manufacturing Processes for Engineering Materials S Kalpakjian, ADDISON-WESLEY

Manufacturing Processes and Systems PF Ostwald & J Munoz, WILEY

MECH 4340: Team Design (Subject)

None

MECH 4710: Industrial Seminars (Level 4)

None

MECH 4730: Automotive Industry Assignments

None

MECH 4810: Professional Project (Level 4)

None

MECH5130: Metal Machining: Mechanics, Heat Transfer and Tribology

Metal Machining THC Childs, K Maekawa, T Obikawa and Y Yamane, ARNOLD

Metal Cutting EM Trent and PK Wright, BUTTERWORTH-HEINEMANN

MECH 5140: Racecar Chassis Engineering

Racecar Vehicle Dynamics WF Milliken and DF Milliken, SAE, 1995

Race and Rally Car Source Book (3rd Edition) A Staniforth, HAYNES, 1992

Chassis Engineering H Adams, HP Books, 1993

Performance Handling D Alexander, MOTORBOOKS INTERNATIONAL, 1990

How to Make Your Car Handle F Puhn, HP BOOKS, 1981

Competition Car Suspension, A Staniforth, HAYNES, 1994

Aerodynamics of Road Vehicles(4th Edition) WH Hucho (ed), SAE, 1998

Road Vehicle Aerodynamic Design RH Barnard, LONGMAN, 1996

Race Car Aerodynamics J Katz, ROBERT BENTLEY PUBL, 1995

MECH 5145: Physiological Measurement & Assessment

Assessment Methodology in Orthopaedics PB Pynsent, JCT Fairbank and AJ Carr, BUTTERWORTH HEINEMANN, Oxford, 1997

Papers from the recent academic journals

MECH 5155: Finite Element Analysis Techniques and Applications

Finite element analysis theory and practice MJ Fagan, LONGMAN, 1996

Using finite elements in mechanical design Mottram & Shaw, McGRAW HILL, 1996

The finite element method: Principles and applications Lewis and Ward, LONGMAN, 1992

MECH 5160: Robotics

No books are essential for this course. However the following books are recommended:

Robotics K S Fu, RC Gonzalez & CSG Lee, McGRAW-HILL, 1987

Robot Manipulators RP Paul, MIT PRESS, 1981

Robotic Engineering: An integrated approach RD Klafter, TA Chmielewski, M Negin, PRENTICE-HALL, 1989

Introduction to Robotics J J Craig, ADDISON-WESLEY, 1986

Engineering Foundations of Robotics FN Nagy & A Siegler, PRENTICE-HALL, 1987

Computer Vision for Robotic Systems MC Fairhurst, PRENTICE-HALL, 1988

MECH 5165: Vehicle Design & Performance

Fundamental of vehicle dynamics TD Gillespie, SAE, 1992

Road vehicle performance GG Lucas GORDON & BREACH, 1986

Brake design and safety R Limpert, SAE, 1992

MECH 5180: Vehicle Ride & Handling

An introduction to Vehicle Dynamics DA Crolla, GR Firth & DNL Horton, UNIVERSITY OF LEEDS, 1992
(copies from lecturer and in the Departmental Library)

Tyres, Suspension and Handling JC Dixon, CAMBRIDGE UNIVERSITY PRESS, 1991

Funamentals of Vehicle Dynamics TD Gillespie, SAE, 1992

Vehicle Handling Dynamics JR Ellis, MECHANICAL ENGINEERING PUBLICATIONS, 1994

The Motor Vehicle (11th Edition) K Newton, W Steeds & TK Garret, BUTTERWORTHS, 1989

Advanced Vehicle Technology H Heisler, EDWARD ARNOLD, 1989

Automotive Handbook (3rd Edition) ROBERT BOSCH GmbH, Stuttgart, 1993 (sold under license by SAE)

MECH 5185: Automotive Chassis Engineering

The Motor Vehicle K Newton, W Steeds, TK Garrett, BUTTERWORTHS, 1989

Handbook of Vehicle Design Analysis J Fenton, MEP, 1996, ISBN 0-8529-8963-6

Automotive Handbook (3rd Edition) Robert Bosch GmbH, STUTTGART, 1993, (sold under license by SAE), ISBN 1-56091-372-X

MECH 5190: Orthopaedic Biomechanics

Introductory

Basic Biomechanics (2nd Edition) SJ Hall, 1995 MOSBY, London

Basic Biomechanics of the Musculo-skeletal System (2nd Edition) M Nordin, VH Frankel, 1989 LEA & FEBIGER, Philadelphia

Core

Biomechanics of the Musculo-skeletal System BM Nigg, W Herzog, 1994, WILEY, Chichester

Clinical Biomechanics of the Spine (2nd Edition) AA White, MM Panjabi, 1990 LIPPINCOTT, Philadelphia.

Occupational Biomechanics (2nd Edition) DB Chaffin, GBJ Andersson, 1990, WILEY, New York

Basic Orthopaedic Biomechanics (2nd Edition) VC Mow, WC Hayes, 1997 LIPPINCOTT RAVEN, Philadelphia

MECH 5195: Automotive Drivetrain Engineering

Vehicle braking AK Baker, PENTECH PRESS, 1986

Braking of road vehicles TP Newcomb, RT Spurr, CHAPMAN & HALLI, 1976 (out of print)

Torsional vibrations in the drive train TP Newcomb, RT Spurr, LuK GmbH, Baden, 1990 (4th International Clutch Symposium)

Industrial brake and clutch design (A Ferodo design manual) AK Baker, PENTECH PRESS, 1992, ISBN 0-7273-0603-0

Brake design and safety Society of Automotive Engineers, R Limpert, 1992, ISBN 1-56091-261-8

Automotive Brake Systems (1st Edition) R Limpert, Robert Bosch GmbH, Stuttgart, 1995 (sold under licence by S.A.E.). ISBN 0-8376-0331-5

Brake Handbook F Puhn, HP BOOKS, 1985. ISBN 0-89586-232-8

Handbook of Vehicle Design Analysis J Fenton, MEP 1996, ISBN 0-8529-8963-6

MECH 5210: Aerothermodynamics

Fundamentals of thermodynamics (5th Edition) RE Sonntag, C Borgnakke & G J van Wylen , JOHN WILEY & SONS INC, 1998

A mathematical introduction to fluid mechanics AJ Chorin & JE Marsden New York, London : SPRINGER-VERLAG, 1990

The theory of homogeneous turbulence GK Batchelor, CAMBRIDGE, 1953

Lecture notes

MECH 5215: Aerodynamics

The elements of aerofoil and airscrew theory H Glauert, C.U.P, 1959

Aerodynamics of road vehicles H Hucho, 1986, ISBN 0-408-01422-9

Fundamentals of aerodynamics JD Anderson, McGraw-Hill, 1984, ISBN 0-07-001656-9

Aerodynamics for engineering students EL Houghton, NB Carruthers, 1982, ISBN 0-7131-3433-X

Road vehicle aerodynamic design RH Barnard, 1996, ISBN 0-582-24522-3

Mech 5220: Cardiovascular Mechanics & Devices

Fluid Mechanics (3rd Edition) JF Douglas, JM Gasiorek, JA Swaffield, 1995, Harlow: Longman Scientific & Technical.

Basic Clinical Physiology (3rd Edition) JH Green, 1981, Oxford: Oxford University Press.

MECH5225:Biomedical Engineering Simulation

Fluid Mechanics (3 rd Edition) JF Douglas, JM Gasiorek, JA Swaffield, 1995, Harlow: LONGMAN SCIENTIFIC & TECHNICAL

Physiology of the heart and circulation (4th Edition) RC Little, WC Little, 1989. YEAR BOOK MEDICAL PUBLISHERS INC. Chicago. EBL Zoology E-2.1 Lit.

The Human Cardiovascular System. Facts And Concepts. JT Shepherd, PM Vanhoutte, 1979.RAVEN PRESS New York. EBL Zoology E-2.1 She.

Finite Element analysis theory and practice MJ Fagan, Longman. 1996

MECH 5230: Computational Fluid Dynamics

Numerical Computation of Internal and External Flows volume 1, Fundamentals of Numrical Discretisation Volume 2, Computational Methods for Inviscid and Viscous Flow C Hirsch, WILEY 1989

Finite Element Methods for Engineers, R T Fenner, Macmillan Press

MECH 5245: Engine Tribology

Engine Tribology, Elsevier Tribology Series (26th Edition) CM Taylor, 1993

MECH 5260: Biomaterials & Biotribology

Orthopaedic biomaterials in research and practice J Black, Churchill Livingstone, 1988, ISBN 0443084858, Out of print, but in library.

Technical papers of recent research.

MECH 5265: Combustion in Engines

Internal Combustion Engine & Fundamentals JB Heywood, McGRAW HILL)

Gas Turbine Combustion A Lefebvre, HEMISPHERE

MECH 5280: Fluids at the Interface

Fluid at the Interface: from the boundary to the free surface Ehret, Gaskell, Kalliadasis, Summers, Thompson, Summer school 1999

MECH 5330: Competitive Product Design

The Principles of Design NP Suh OXFORD UNIVERSITY PRESS, 1990

MECH 5350: Product Introduction in a Healthcare Business Process Context

Market-Driven Health Care, Who Wins, Who Loses in the Transformation of America's Largest Service Industry RE Herzlinger. Perseus Books, Reading Massachusetts, 1997

Product Design and Development KT Ulrich and SD Eppinger, McGraw Hill, Inc, 1995

MECH5360: Life Cycle Engineering

Reliability, Maintainability and Supportability : A Probabilistic Approach Jezdimir Knezevic, McGraw-Hill, ISBN: 0077076915

MECH 5410: Introduction to Surface Engineering

A Guide to Surface Engineering Terminology E Tyrkiel and PA Dearnley (eds), The Institute of Materials, London, 1995

ASM Handbook Volume 18, "Friction, Lubrication and Wear Technology ASM International, Materials Park, OH, 1992.

Surface Engineering, A journal of The Institute of Materials London, since 1985

Tribology IM Hutchings. Edward Arnold, 1992

MECH 5510: Computational & Experimental Methods

Fortran 77 programming (2nd Edition) TMR Ellis, Addison Wesley

Fortran 77 with numerical methods for scientists and engineers, DM Etter, Benjamin Cummings

Experimental methods for engineers, JP Holman , McGraw Hill.

MECH 5600: Mres Research Project

None

MECH 5610: MRes Research Project with Project Management

None

MECH 5821: Professional Project

None

MECH 5822: Technical Engineering Project

None

MECH 5960: Analysis and Selection of Manufacturing Processes

None

