

List of Literature to prepare for conditional requirement courses



TECHNISCHE
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28.10.2021

In addition to the lecture material, all English-speaking students who received a conditional admission are encouraged to read the following literature in the relevant subject areas to prepare for their required courses and exams.

This bibliography is suitable for students without any German skills as a preparation aid for the examinations of the courses that are required as part of their conditional admission and that must be completed for the master's programmes "Aerospace Engineering" and "Mechanical Engineering".

Numerical Methods 16-19-5010

- **Computational Engineering – Introduction to Numerical Methods** **Michael Schäfer**
Springer Publishing Company, Berlin Published: 2006
ISBN 978-3-54030-685-6

Machine Components and Mechatronics I 16-24-5010

- **Mechatronic Systems – Fundamentals** **Rolf Isermann**
Springer Publishing Company London 1st Edition, Softcover Published: 2005
ISBN 978-1-85233-930-2 DOI 10.1007/1-84628-259-4
- **Sensors: Handbook of Modern Sensors** **Jacob Fraden**
Springer International Publishing 5th Edition Published: 2016
ISBN 978-3-319-30767-1 Softcover DOI 10.1007/978-3-319-19303-8
- **Practical PID Control** **Antonio Visioli**
Springer Publishing Company London 1st Edition, Softcover Published: 2006
ISBN 978-1-84996-622-1 DOI 10.1007/1-84628-586-0
- **Mechatronics with Experiments** **Sabri Cetinkunt**
John Wiley & Sons Inc 2nd Edition Published: 2015
ISBN 978-1-118-80246-5,



Machine Components and Mechatronics II

16-05-5020

- **Design of Machine Elements** **V B Bhandari**
 McGraw-Hill Publishing Company 4th Edition 2-2017-01
 ISBN 978-9339221126
- **Fundamentals of Machine Elements** **Steven R. Schmid, Bernard J. Hamrock,
Bo O. Jacobson**
 Apple Academic Press Inc. 3rd Edition 2-2014-02
 ISBN 9781482247480
- **Mechanical Design Engineering Handbook** **Peter RN Childs**
 Butterworth-Heinemann 2nd Edition 2-2019-01
 ISBN 978-0081023679
- **Rolling Bearings Analysis** **Tedric A. Harris**
 John Wiley & Sons 3rd Edition 2-1991-03
 ISBN 978-0471513490

Measurement Techniques, Sensors and Statistics

16-11-3132

- **Random Data: Analysis and Measurement Procedures** **Julius S. Bendat / Allan G. Piersol**
 Wiley 4th Edition
 ISBN 978-0-470-24877-5
- **Measurement Systems: Application and Design** **Doebelin, E. O., Manik, D. N.**
 McGraw-Hill Publishing Company
 ISBN 978-0071194655
- **Digital Image Processing** **Jähne, B.**
 Springer Publishing Company Published: 2005
 ISBN 978-3-540-27563-3

Control Engineering

16-23-5010

- **Feedback Control of Dynamic Systems** **G.F. Franklin, J.D. Powell, A. Enami-Naeini**
 Prentice Hall International
 ISBN 978-0130323934

Engineering Mechanics II (Elastostatics)

16-61-3011

- **Engineering Mechanics 2** Gross, Hauger, Schröder, Wall, Bonet
Springer Publishing Company Published: 2018
ISBN 978-3662562710

Fundamental Fluid Mechanics

16-11-5010

- **Strömungslehre - Einführung in die Theorie der Strömungen** J. Spurk, N. Aksel
Springer Publishing Company, Berlin
ISBN 978-3-662-58763-8
For students' free access available: <https://doi.org/10.1007/978-3-662-58764-5>
English Edition ISBN 978-3030302610

Technical Thermodynamics I

16-14-5010

- **Introduction to Thermodynamics and Heat Transfer** Y. A. Çengel
McGraw-Hill Publishing Company
ISBN 978-0071287739
- **Thermodynamics: An Engineering Approach** Y. A. Çengel, M. A. Boles
McGraw-Hill Publishing Company
ISBN 978-0073398174

