# **Library Subject Guide - Mechanical & Mechatronics Engineering**

UOW Malaysia KDU Library collections can be found via Library catalogue either in print or electronic.

# 1) Quick Guide

### 1.1 Call Number

Call numbers for Mechanical & Mechatronics Engineering (TJ1-1570)

Call number	Subject
TJ1-1570	Mechanical engineering and machinery
TJ144-157	General works on mechanical engineering
TJ160-160.5	Communication in mechanical engineering
TJ163-163.12	Mechanical and electrical engineering combined
TJ163.13-163.25	Power resources
TJ163.26-163.5	Energy conservation
TJ163.6-163.95	Power (Mechanics)
TJ170-173	Mechanics applied to machinery. Dynamics
TJ181-210	Mechanical movements
TJ210.2-211.495	Mechanical devices and figures. Automata. Ingenious mechanisms. Robots
TJ212-225	Control engineering systems. Automatic machinery (General)
TJ227-240	Machine design and drawing
TJ250-253	Prime movers in general
TJ254.5-254.7	Combustion engineering
TJ255-265	Heat engines. Heat engineering
TJ263-263.2	Heat exchangers
TJ266-267.5	Turbines. Turbomachines (General)
TJ268-280.7	Steam engineering
TJ281-393	Steam boilers
TJ395-444	Steam powerplants. Boiler plants
TJ461-567	Steam engines
TJ603-695	Locomotives

TJ699.2-740	Other steam engines
TJ751-805	Miscellaneous motors and engines
TJ807-830	Renewable energy sources
TJ836-935	Hydraulic machinery
TJ930-933	Pipelines (General)
TJ940-940.5	Vacuum technology
TJ950-1030	Pneumatic machinery
TJ1040-1119.2	Machinery exclusive of prime movers
TJ1125-1345	Machine shops and machine shop practice
TJ1350-1418	Hoisting and conveying machinery
TJ1425-1475	Lifting and pressing machinery
TJ1480-1496	Agricultural machinery. Farm machinery
TJ1501-1519	Sewing machines

#### 1.2 Location of the Call Number

The above call number of books of subject Mechanical & Mechatronics Engineering listed in UOWM KDU Library. The books are mainly located at:

- Open shelf (Teo Soo Pin Library, Glenmarie Second Floor)
- Open shelf (Damansara Jaya Library)

### 1.2.1 Search and Locate Library Materials

User can search the titles by using our webPAC (Web Public Access Catalogue) as a tool to locate what is in the Library. You search a catalogue to see what a library has and to know where to locate the item required.

Access to our webPAC with the link below:

http://webpac.kdu.edu.my/search/query?theme=kdu

Users can also use Advanced Search if they have the information of the "Title" and "Author" of the book, or either one.

http://webpac.kdu.edu.my/search/advanced?theme=kdu

#### 1.3 Search Guides

The following links will assist you to access the several guides on how to use:

- Web Public Access Catalogue
  <a href="https://library.uowmkdu.edu.my/index.php/how-to-use-online-catalogue">https://library.uowmkdu.edu.my/index.php/how-to-use-online-catalogue</a>
- e-Database search tips https://library.uowmkdu.edu.my/index.php/the-e-databases-search-tips
- Referencing and Citation
  <a href="https://library.uowmkdu.edu.my/index.php/referencing">https://library.uowmkdu.edu.my/index.php/referencing</a>
- Subject guide https://library.uowmkdu.edu.my/index.php/subject-quides

# 2) Reference

Reference materials such as dictionaries, encyclopaedias, and handbook can only be use inside the library.

### 2.1 Handbooks

Images	Titles
No image available	Machinery's handbook guide to the use of tables and formulas: hundreds of examples and test questions on the use of tables, formulas, and general data in Machinery's handbook / by John M. Amiss, Franklin D. Jones, and Henry H. Ryffel Call number: TJ151.Mac 1984
MARKS STANDARD HANDBOOK MECHANICAL ENGINEERS 11 th EDITION BECKER, AVAILOUS THEINMAN JUSTER IN ALL A SAUGH	Marks' standard handbook for mechanical engineers  Call number: TJ151.Sta 2007
Mechanical Engineer's	Newnes mechanical engineer's pocket book / Roger Timings and Tony May Call number: TJ151.Tim 1997

# 2.2 Periodicals (Magazines / Journals)

### 2.2.1 Subscribed e-Journals

> IET Digital Library

# 3) Books

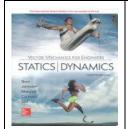
# 3.1 Library Books

Besides searching using Online Catalogue (webPAC), user can also search the titles available under Reading List for Engineering programmes.

The link below will lead to the page where user can search using Course ID, Course Name, Programme Name, and Title.

http://webpac.kdu.edu.my/reserves/search?theme=kdu

Images	Titles
Shigley's Mechanical Engineering Design	Shigley's mechanical engineering design / Richard G. Budynas, J. Keith Nisbett Call number: TJ230.Bud 2015
Physics In Scientists and Engineers WITH MARKEN PRIVATE SERWAY JEWESS	Physics for scientists and engineers with modern physics / Raymond A.  Serway, John W. Jewett  Call number: QC21.3 Ser 2019
University Physics util Molety Physics park Ware Park A Barra	Sears and Zemansky's university physics: with modern physics / Hugh D. Young, Roger A. Freedman Call number: QC21.3 You 2020
Engineering 1 Materials  ACCOUNT TO BE SEED FOR THE SEED	Engineering materials 1: an introduction to properties, applications and design / David R. H. Jones, Michael F. Ashby  Call number: TA403.Ash 2019



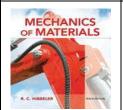
<u>Vector mechanics for engineers. Statics and dynamics / Ferdinand P. Beer, E. Russell Johnston, Jr., David F. Mazurek, Phillip J. Cornwell, Brian P. Self</u>

Call number: TA350 Bee 2019



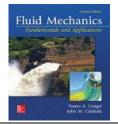
Machine drawing / Basudeb Bhattacharyya

Call number: TJ230 Bha 2011



Mechanics of materials / R.C. Hibbeler

Call number: TA405 Hib 2017



Fluid mechanics: fundamentals and applications / Yunus A. Çengel,

John M. Cimbala

Call number: TA357 Cen 2018



Mechatronics and robotics engineering for advanced and intelligent manufacturing / Dan Zhang, Bin Wei

Call number: TJ163.12 Mec 2017



Machine vision and mechatronics in practice / edited by John Billingsley, Peter Brett

Call number: TJ163.12 Mac 2015

#### 3.2 e-Books

e-Books can be search in webPAC or use the following e-books collection to search for your topics.

- ProQuest Ebook Central
- **EBSCOhost eBook Collection**

#### 3.3 Other Open Sources e-Books Resources

#### BCcampus OpenEd

Search for quality open textbooks offered in a variety of digital formats; the first step in adopting open educational resources. Search by subject and download them to your computer.

https://open.bccampus.ca/

# Directory of Open Access Books (DOAB Foundation)

The primary aim of DOAB is to increase discoverability of Open Access books. Academic publishers are invited to provide metadata of their Open Access books to DOAB. Metadata will be harvestable in order to maximize dissemination, visibility and impact. Aggregators can integrate the records in their commercial services and libraries can integrate the directory into their online catalogues, helping scholars and students to discover the books. The directory is open to all publishers who publish academic, peer reviewed books in Open Access and should contain as many books as possible, provided that these publications are in Open Access and meet academic standards. https://www.doabooks.org/

#### Ebooks and textbooks from bookboon.com

Free access to hundreds of free textbooks written by professors from the world's top universities, all on one easy-to-access online ebook platform. https://bookboon.com/en/textbooks

### InTech Open (IntechOpen Limited)

Leading global publisher of Journals and Books within the fields of Science, Technology and Medicine. Built by scientists, for scientists to provides a collaborative environment for peer-reviewed scientific content and book publishing of academic research, giving scientific thinking its home.

https://www.intechopen.com/books

## LibreTexts (California State University)

A non-profit organization committed to freeing the textbook from the limitations and costs of traditional textbooks with open and freely accessible LibreTexts that can provide a more engaging learning experience for students without the financial burden. https://libretexts.org/index.html

## Unglue it (Free Ebook Foundation)

Contains more than 70,000 free ebooks that support authors, publishers, or other rights holders who want their ebooks to be free.

https://unglue.it/

# > Teaching Commons (Bepress)

Brings together high-quality open educational resources from leading colleges and universities.

https://teachingcommons.us/

### Open Textbook Library

Provide textbooks that have been funded, published, and licensed to be freely used, adapted, and distributed. These books have been reviewed by faculty from a variety of colleges and universities to assess their quality.

https://open.umn.edu/opentextbooks/

### ➤ MIT OpenCourseWare textbooks (Massachusetts Institute of Technology)

An index to the online textbooks in MIT OpenCourseWare. Each link goes to a course or resource page that contains the textbook files.

https://ocw.mit.edu/courses/online-textbooks/

# 4) Subscribed e-Databases

UOWM KDU Library subscribed e-Databases can be found here:

https://library.uowmkdu.edu.my/index.php/online-databases

# EBSCOhost (Academic Search Complete – ASC)

Designed specifically for academic institutions, ASC is comprehensive, scholarly, and multi-disciplinary with more than 8,500 full-text periodicals, including nearly 7,300 peer-reviewed journals.

#### > Emerald

Emerald is a leading scholarly publisher in business and management. This database provides a comprehensive collection of 213 peer-reviewed management journals.

# 5) Free Online Resources

Free online resources can be accessed through UOWM KDU library website via this link: <a href="https://library.uowmkdu.edu.my/index.php/external-links">https://library.uowmkdu.edu.my/index.php/external-links</a>

# 5.1 e-Databases

e-Databases	Links
Cambridge Open Access – Journals  Open access content that covers a broad range of subjects	https://www.cambridge.org/core/what-we-publish/open-access/listing?aggs%5bproductTypes%5d%5bfilters%5d=JOURNAL&sort=titleSort:asc
Directory of Open Access Journals (DOAJ)  DOAJ is a community-curated online directory that indexes and provides access to high quality, open access, peer-reviewed journals.	https://www.doaj.org/
EBSCO Open Dissertation  EBSCO Open Dissertation is free for authors and participating institutions with the desired end of making significant open-access content more readily discoverable to end-users within and beyond academic institutions.	https://biblioboard.com/opendissert ations/
Elsevier Open Access  All articles have undergone peer review and upon acceptance are immediately and permanently free for everyone to read and download.	https://www.elsevier.com/about/op en-science/open-access/open- access-journals
Elsevier R&D Solutions  High quality tools that deliver technical data, analytics and technology capabilities to help you shorten the distance between discovery and impact.	https://www.elsevier.com/rd-solutions
IEEE Access A multidisciplinary, open access, applications-oriented, all-electronic archival journal that continuously presents the results of original research or development across all of IEEE's fields of interest.	https://ieeexplore.ieee.org/xpl/Recentlssue.jsp?punumber=6287639

Sage Open Access The world's largest independent academic publisher and is committed to global dissemination of research. We have published open access journals for a number of years with the goal of disseminating vital research to the broadest community.  Sage Podcasts and Vodcasts SAGE podcasts and vodcasts span a wide range of	https://us.sagepub.com/en- us/nam/Open-access-at-sage  https://us.sagepub.com/en- us/nam/podcasts
subject areas including business, humanities, social sciences, and science, technology, and medicine.	
Springer Open Access  SpringerOpen, launched in June 2010, includes  Springer's portfolio of 200+ peer-reviewed fully open access journals across all areas of science.	https://www.springeropen.com/all-subjects?utm_source=website&utm_medium=Referral&utm_campaign= SpringerComSOPage
Taylor & Francis Open Access Taylor & Francis Group's flourishing program of full open access journals.	https://www.tandfonline.com/open access/openjournals
Wiley Open Access Wiley Open Access publishes authoritative peer reviewed open access journals across many research disciplines.	https://authorservices.wiley.com/op en-research/open-access/browse- journals.html
World Academy of Science, Engineering and Technology An open science, peer reviewed, scholarly research journal that adheres to the highest standards of peer review, focusing on theories, methods and applications in science, engineering and technology.	http://publications.waset.org/

# 5.2 e-Journals

e-Journals	Links
International Journal of Mechanical Engineering and Technology (IJMET)  Open access content that covers Engineering subject.	http://www.iaeme.com/ijmet/issues .asp?JType=IJMET&VType=11&IType =2
Journal of Applied Mechanical Engineering The journal provides an open access platform in all aspects of science and engineering related to applied mechanics.	https://www.longdom.org/applied- mechanical-engineering.html
Mechatronics Provide rapid publication of topical papers featuring practical developments in mechatronics.	https://www.sciencedirect.com/jour nal/mechatronics
International Journal of Mechanical Engineering and Mechatronics (IJMEM)  A high-quality peer-reviewed journal, where every article will be peer-reviewed by several experts in the field. Upon acceptance, articles will be published in the latest open volume.	https://ijmem.avestia.com/
Engineering Science and Technology, an International Journal  A peer-reviewed quarterly engineering journal that publishes both theoretical and experimental high-quality papers in the field of engineering and applied science which aims to promote the theory and practice of technology and engineering.	https://www.sciencedirect.com/jour nal/engineering-science-and- technology-an-international-journal
Ain Shams Engineering Journal International journal that devoted to publication of peer reviewed original high-quality research papers and review papers in both traditional topics and those of emerging science and technology.	https://www.sciencedirect.com/jour nal/ain-shams-engineering-journal
Alexandria Engineering Journal An international journal that devoted to publishing high-quality papers in the field of engineering and applied science.	https://www.sciencedirect.com/jour nal/alexandria-engineering-journal

Engineering The journal aims to provide a high-level platform where cutting-edge advancements in engineering R&D, current major research outputs, and key achievements can be disseminated and shared, to report progress in engineering science, discuss hot topics, areas of interest, challenges, and prospects in engineering development, and many more.	https://www.sciencedirect.com/jour nal/engineering
IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE) A double-blind peer reviewed International Journal that provides rapid publication of articles in all areas of mechanical and civil engineering and its applications.	http://iosrjournals.org/iosr- jmce.html
Journal of Computational Design and Engineering Open access content that covers Engineering subject.	https://www.sciencedirect.com/jour nal/journal-of-computational- design-and-engineering
International Journal of Mechanical and Materials Engineering A peer-reviewed, international and interdisciplinary journal that provides a forum for cross-disciplinary research contributions covering a broad spectrum of issues pertaining to the mechanical and machining properties of materials as well as materials science, and how they apply to materials used in equipment and structures.	https://ijmme.springeropen.com/
Journal of Mechatronics, Electrical Power, and Vehicular Technology An international journal that publish original research papers, review articles and case studies focused on mechatronics, electrical power, and vehicular technology as well as related topics.	http://www.mevjournal.com/index.php/mev/index
Journal of Mechanical Engineering and Sciences (JMES) An open access, peer-review journal which publishes original and review articles that advance the understanding of both the fundamentals of engineering science and its application to the solution of challenges and problems in mechanical engineering systems, machines and components.	http://journal.ump.edu.my/jmes/

Journal of Mechatronics and Robotics  The journal publishes original and innovative research and practical developments in the field of mechatronics and robotics.	https://thescipub.com/journals/jmr
Engineering Reports Engineering Reports is an online, open access, peer- reviewed journal dedicated to all aspects of engineering and computer science.	https://onlinelibrary.wiley.com/page/journal/25778196/homepage/overview

# **5.3 Websites**

Websites	Links
Royal Academy of Engineering Royal Academy of Engineering brings together the most talented and successful engineers to advance and promote excellence in engineering for the benefit of society.	https://www.raeng.org.uk/
National Academy of Engineering (NAE) A private, independent, non-profit institution that provides engineering leadership in service to the nation.	https://www.nae.edu/
CERN Accelerating science  CERN helps to uncover what the universe is made of and how it works by providing a unique range of particle accelerator facilities to researchers, to advance the boundaries of human knowledge.	https://home.cern/