Engineering information resource guide

Introduction

The Moore Library

The Moore Library houses the current working collections of the University Library in engineering, as well as mathematics and allied physical sciences. The Library acquires material to support both research and teaching activities in these subjects.

A large collection of older print material is retained at the main <u>University Library</u> building on West Road.

Help and advice

Advice on the use of the Library, its collections, or any information-based issue may be obtained from the Library's subject specialist staff, who can be contacted on (01223 7) 65676/7 or moore-library@lib.cam.ac.uk. Sue Lambert (65677, svl20@cam.ac.uk) has particular responsibility for engineering.

Joining the Moore Library

The Moore Library admits all students and senior members of the University, and other persons in possession of a valid University Library or Medical Library card.

Outside staffed hours, access to the Library for reference purposes is provided to holders of University Cards that have been validated for 24-hour access.

Registered readers eligible for 24-hour access are:

- 1. Undergraduate students
- 2. Postgraduate students
- 3. Senior members of the University and research staff

Please note that all persons admitted to the Library are required to register as readers. Reader registration and card validation for 24-hour access must be done in person between 0930 and 1630 Monday - Friday.

Arrangement of print collections

Classification

Books and journals in the Library are shelved according to the Library of Congress (LC) classification scheme, an alphanumeric system in which the major subject divisions are allocated a single or double letter code between A and Z. Books are fully classified, while journals are just given a one- or two-letter classmark and then arranged alphabetically within this by title.

Although many books will be classified in the T (for Technology) sections, due to the interdisciplinary nature of engineering, it is likely that you will also become familiar with other science classes, such as QA (Mathematics) and QC (Physics).

Broad engineering-related areas include:

Building engineering	TH
Civil engineering	TA
Electrical engineering	TK
Environmental engineering	TD
Manufacturing engineering	TS
Mechanical engineering	TJ
Road and Bridge engineering	TE-TG

Catalogue searching

To find items within the Moore Library search using <u>Newton – Catalogue for the libraries of the University</u>.

A wide variety of search options are provided (see <u>online help</u> for details), but the three basic types described below will enable you to find most things you want.

Journal Title Search

You want to find the journal article given in the reference:

M.E. Robinson and M.J. Crowder

[1] The use of residuals in statistical modeling for fatigue-crack growth under constant amplitude loading, IEEE Trans. Rel., vol. 51, no. 2 (2002), 216-222.

Individual articles within journals are *not* separately catalogued, so you need to look for the journal as a whole and then check whether or not that particular volume is held by the Library.

Use the 'Basic' search option, and select 'within Journal title':

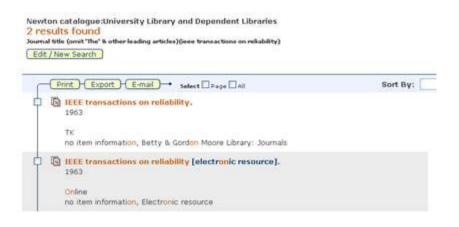
Basic Advanced		•Q Search History
Search: leee transactions on reliability	within Journal tile (omit 'The' & other lead	ding articles) 💌
Limit To: none		
Records per page: 25 records per page 💌		Search

Type the beginning of the journal title into the box, and click on 'Search'.

As in this example, journal titles are often abbreviated in references. If you don't know what an abbreviation stands for, try looking it up in Alkire's *Periodical title abbreviations*, at classmark Ref Z6945.A2 .P47 2001.

You now get a list of all journal titles that match the phrase you typed in.

There are unfortunately often at least two records for each journal due to previous cataloguing practice: check both before you conclude the journal you're looking for is not available.

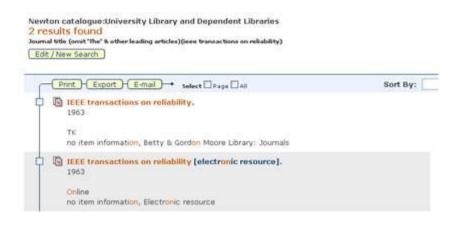


Click on the title of the first journal to be taken to the record.

IEEE transactions on reliability. IEEE transactions on reliability. Title: IRE Transactions on Reliability and Quality Control Continues: New York, 1963-Published: Vol. 12-ISSN: 0018-9529 Reliability (Engineering) -- Periodicals. Subjects: Holdings Information Location: Betty & Gordon Moore Library: Journals TK. Classmark: 0 Number of Items: No information available Status:

You can now see that the year you need is in the Library, and that the journal is shelved at classmark TK.

Note that this title is also available online as an electronic resource, see the second item from your original search:



Again, click on the title of the journal to be taken to the record:

		Title results 🛛 📢 Prev
IEEE transac	tions on reliability [electronic resource].	This item: Record View
Title:	IEEE transactions on reliability (Online) IEEE transactions on reliability [electronic resource].	• Staff View
Portion of Title:	Transactions on reliability Reliability	Actions: • Export
Continues: Other Entries:	IRE transactions on reliability and quality control IEEE Reliability Society. IEEE Xplore (Online service)	 E-mail Recall or Stack request (Recall for items on loan only, State)
Published:	[New York, N.Y. : Institute of Electrical and Electronics Engineers Print began with vol. R-12, no. 1 (Mar. 1963).	for Reading Room and West Room (NOT periodicals) - see item displ • Print
Description:	Text (electronic journal). Five no. a year	 View a floorplan showing its locations
ISSN:	1558-1721	 Find this online, elsewhere i
Notes:	Description based on: Vol. 37, no. 1 (Apr. 1988); title from IEEExplore homepage (viewed July 18, 2000).	Cambridge and the UK
	Latest issue consulted: vol. 58, no. 2, June 2009 (IEEE Xplore, viewed July 20, 2009). Access restricted to authorised University of Cambridge users Mode of access: World Wide Web. Issued by the: IEEE Reliability Society.	Link to this record: • URL : http://hooke.lib.cam. /cgi-bin/bib_seek.cgi?cat=ul& bib=4085429
Subjects:	Electronic industriesQuality controlPeriodicals. Industries électroniquesQualitéContrôlePériodiques.	
Links:	Full text available from IEEE/IET Electronic Library (IEL): 1963 to present	

The Links lines at the bottom of the screen give details about what is available; in this case full text is available from 1963 to the present.

Click on the relevant line to be taken directly to the online version of the journal:

BROWSE *	MY SETTINGS 🔻	CART		SIGN IN
	Browse > Journals>	Reliability, IB	EEE Transactions	? Page Help
QUICK SEARCH Volume: * Issue: 60 Start Page: 60	IEEE TRANS		ON	
	Set Alert On This Journal	View Popular		
ABOUT THIS JOURNAL	RELIABILITY	Early Acce	ess: View Articles	
 Content Announcements Author Resources 			ear: 2010 💌	
TITLE HISTORY			me: Volume: 59 Issue: 3 💌	VIEW CONTENTS

Author / Title Search for Books

You want to find the book given in the reference:

H. W Coleman, W. G. Steele

[2] Experimentation and uncertainty analysis for engineers, Wiley, 1989.

Use the 'Advanced' search option.

Basic	Advanced			Search Histor
Search:	coleman	all of these 📝 within	Author Name 💌	
	AND 💌			
	experimentation	all of these 💌 within	Title	

Type the author's surname into the first box and choose 'within Author Name'.

Type a distinctive word from the title into the second box and choose 'within Title'.

Click on 'Search' at the bottom of the screen.

You now get a list of all the books which match those two words:

Newton catalogue:University Library and Dependent Libraries 2 results found Author Name(coleman) AND Title (experimentation) Edit / New Search 1 Print) Export) E-mail } Sort By: Select Dage 🗖 1 🛄 Coleman, Hugh W. Experimentation and uncertainty analysis for engineers / Hugh W. Coleman, W. Glenn Steele, Jr. 1999 TA153 .C65 1999 🗱 not currently available, Betty & Gordon Moore Library 2 🛄 Coleman, Hugh W. Experimentation and uncertainty analysis for engineers / Hugh W. Coleman, W. Glenn Steele, Jr. 1989 TA153 .C65 1989 Vavailable, Betty & Gordon Moore Library

The date for the first book matches your reference, and clicking on this takes you to its record:

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Experimentation and uncertainty analysis for engineers / Hugh W. Coleman, W. Glenn Steele, Jr.
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Main author:	Coleman, Hugh W.
Title:	
Experimentation and	uncertainty analysis for engineers / Hugh W. Coleman, W. Glenn Steele, Jr.
Other Entries:	Steele, W. Glenn.
Published:	New York ; Chichester ; Wiley, c1989.
Description:	xii, 205 p. : ill. ; 25 cm.
ISBN:	0471635170
Notes:	"A Wiley-interscience publication" Includes bibliographical references and index.
Subjects:	EngineeringExperiments. Uncertainty. Experimental design.
Holdings Informatio	n
Location:	Betty & Gordon Moore Library
Classmark:	TA153 .C65 1989
Number of Items:	1

Again, the Library holds the book, it is available, and the classmark is TA153 .C65 1989.

Books in numbered series

Status:

- Available

Sometimes you will come across references to books by their series title and number only, or even more confusingly, an article within one of these books. They are not journals, despite the fact that references can make them look very similar, and are best searched for as shown below. [If you are unable to tell whether a reference is to a series or a journal, ask for help or just try both methods of searching.] You want to find the following work:

[3] Microwave technology series, no. 6 (1993)

Use the 'Advanced' search option.

Basic	Advanced	Search History
Search:	microwave technology series 6	all of these 💉 within Series 💉

Alter the top option to be 'within Series', and type keywords from the series title plus the volume number into the search box. Click on 'Search' at the bottom of the screen.

In this example, only one book matches, so you are taken straight to the record:

Phase locked loops / J.B. Encinas.

Main author:	Encinas, J. B.	
Title:	Phase locked loops / J.B. Encinas.	
Uniform Title:	[Systèmes à verrouillage de phase. English]	
Edition:	English language ed.	
Published:	London : Chapman & Hall, c1993.	
Description:	xii,193 p. : ill. ; 24 cm.	
ISBN:	0412482606	
Series:	Microwave technology series ; 6	
Notes:	"Translated from the French" - t.p. verso. Includes bibliographical references and index.	
Subjects:	Phase-locked loops.	
Holdings Informat	tion	
Location:	Betty & Gordon Moore Library	
Classmark:	TK7872.P38 .E53 1993	

Again, this is the book that you want, it is available, and the classmark is: TK7872.P38 .E53 1993

LibrarySearch

Number of Items:

Status:

1

- Available



LibrarySearch <u>LibrarySearch</u> enables the cross-searching of records for printed books, journals, and electronic material held in all the libraries in the University of Cambridge. Records from the <u>Newton</u> library catalogues and the <u>DSpace@cambridge</u> repository are included, and searches can be expanded to include article databases such as JSTOR.

Networked information services

Campus wide information services are co-ordinated and supported centrally by the University Library.

The main <u>Electronic Resources</u> page on the Library website provides a search/browse option for both electronic journals and online databases, which is useful if you know the title of the resource you want to utilise; and alternatively lists all the resources available in each given subject area, e.g. 'Engineering and Technology'.

Access and passwords

Many networked electronic services are made available within the "cam" domain via IP address recognition, and for these no password is required. Most of the remainder are accessible using a <u>Raven</u> password.

Raven passwords are <u>issued</u> to current staff and students of the University by the Computing Service.

Frequently-updated information about access, passwords, and copyright is <u>available</u> from the University Library.

Retrospective literature searching

Databases

If you are interested in finding out what books and articles from journals and conference proceedings exist on a particular subject or by a given author (say), a couple of useful starting points would be:

WEB OF KNOWLEDGESM

in proud partnership with Jisc <u>Web of Knowledge</u>. This platform provides access to a variety of valuable resources, including *Web of Science* and *Inspec*.

Web of Science is the online version of the ISI Citation Indexes and ISI Proceedings. Updated weekly, the databases contain abstracts and indexes for journal articles and a small selection of monographic series volumes in all subject areas from at least 1970 onwards (from 1899 for science subjects); along with articles in conference proceedings from 1990 onwards. Since each record contains a list of all references cited in the corresponding article, it is possible to search for all articles that cite a known author or work.

Inspec is the online version of *Science Abstracts*. Updated weekly, the database contains abstracts of journal articles and conference papers (as well as significant books, technical reports, and dissertations) from 1969 onwards in the areas of physics, electrical engineering, electronics, computers, control, and information technology.

It is also possible to cross-search all these products. You need a Raven password to make use of this package of resources.

Scopus - is the largest abstract and citation database of research literature (journals, book series, conference proceedings and patent records) and quality web sources across all subject areas. It contains records for selected material dating back to 1823, and is updated daily.

Databases of dissertations and theses

Dissertations and theses are generally indexed separately from other types of literature. The two databases available (which cover all subject areas) are:



EThOS **ELECTRONIC THESES ONLINE SERVICE Opening access to UK theses**

EThOS (Electronic Theses Online Service) - a database provided by the British Library which aims to offer a unified access point for all theses produced by UK Higher Education. Of the theses listed, some will be available in electronic form for immediate free download, while others will only be represented by a summary 'catalogue-style' record. This database is completely free to search, and only requires you to register (which is also free) if you wish to download any of the theses. Once registered, you are also able to request digitisation of any of the theses not yet available for download, but a charge does apply for this service.

ProQuest

Proquest Dissertations & Theses - a database of references to doctoral and masters dissertations from 1861 onwards. Although the main focus is on the US, dissertations from universities in Europe and the rest of the world are also included. This database works on IP address recognition.

All University of Cambridge theses (for the degrees Doctor of Philosophy, two-year Master of Philosophy, Master of Science and Master of Letters) accepted since 1921 are held in the Manuscripts Reading Room at the University Library. Such theses from 1970 onwards have records on the Newton Manuscripts and Theses catalogue. A small but increasing number of Cambridge theses are available for immediate download from DSpace@Cambridge.

Current awareness

It is possible to sign up for services that will send you emails alerting you as new material is published in a given journal or on a particular subject. Many are provided by publishers themselves, but a good place to start would be:



ZETOC Alert. ZETOC itself is another useful general database of references to journal articles and conference papers maintained by the British Library, while by signing up to ZETOC Alert you can be emailed the table of contents from particular journals or receive details of articles which match your predefined search criteria.

Ejournals

The University Library subscribes to a large number of electronic journals. These can be accessed from the <u>ejournals@cambridge</u> page, which provides title and ISSN searches that return information on which years are included in the subscription and how access to the titles is controlled.

For example:

Engineering failure analysis [1350-6307] Elsevier SD Backfile Complete - Avail from: 1994 till present Access: Available on Campus. Off-campus access available through Raven password or VPDN connection Elsevier SD Freedom Collection -Access: Available on Campus. Off-campus access available through Raven password or VPDN connection mere options ...

Ebooks

The University is also building up a collection of ebooks, which can be accessed from the <u>ebooks@cambridge</u> page.

The packages of especial interest to engineers include those published by <u>Springer</u>, <u>IEEE-</u><u>Wiley</u> and selected titles from <u>CUP</u>.

Related links

Further information about the Engineering Department Library.