

## Assessment of Library Collections

Florida International University

### **Engineering Management**

May 19, 2009

This report was prepared by Tony Schwartz, Associate Director for Collection Management, and Patricia Pereira-Pujol, Sciences Librarian.

#### **Conference Proceedings**

For the College of Engineering and Computing, FIU has access to the following online series that include full-text conference proceedings: Association for Computing Machinery Digital Library; IEEE/IET Electronic Library; and Springer *Lecture Notes in Computer Science*, which includes subseries *Lecture Notes in Artificial Intelligence* and *Lecture Notes in Bioinformatics*.

#### **Journals**

##### Library subscriptions by general count

FIU has 4,129 online journals generally in engineering and computer science ([Table 1](#)) and 667 in the field of management.

The numbers of print-journal subscriptions for Engineering and Computing is nearly zero as the library has shifted such subscriptions to online access.

The online-journal packages of importance to Engineering and Computing include ACM Digital Library, American Chemical Society, American Institute of Physics, American Mathematical Society, American Physical Society, American Society of Civil Engineers, American Society of Mechanical Engineers, American Statistical Association, Annual Reviews Complete, Berkeley Electronic Press, Blackwell-Synergy, Cambridge STM, EDP Sciences, Elsevier ScienceDirect, Highwire Press, IEEE/IET Electronic Library, InformaWorld, Institute of Physics, Journal@rchive (Japan Science and Technology Agency), JSTOR Arts and Sciences Collections I-IV, National Research Council Canada, Nature, NUMDAM, Oxford, Palgrave Macmillan, Royal Society of Chemistry, SAGE Premier, SpringerLink, and Wiley InterScience.

##### Citation-ranked literatures

Operations Research and Management: FIU has 44 (73%) of the 60 titles. Five years ago, FIU had 17 (28%)—Table 2.

Management: FIU has 53 (88%) of the 60 titles, including 100% of the top third (20 titles). Five years ago, FIU had 51 (85%)—Table 3.

## **Databases in Engineering and Computing**

- ABI Inform
- AGRICOLA (includes conference proceedings)
- ASFA: Aquatic Sciences and Fisheries Abstracts (includes conference proceedings)
- Biological Abstracts (BIOSIS)
- Biological Sciences (includes conference proceedings)
- Biotechnology and Bioengineering Abstracts
- Chemical Abstracts (SciFinder Scholar) (includes conference proceedings)
- Compendex (Engineering Index) (includes conference proceedings)
- Computer and Information Systems Abstracts (includes conference proceedings)
- Computer Database
- Conference Papers Index (conference proceedings, etc.)
- Current Index to Statistics (includes conference proceedings)
- Dissertations & Theses
- Electronics and Communications Abstracts (includes conference proceedings)
- Engineering Research Database (contains ANTE: Abstracts in New Technologies and Engineering; includes conference proceedings)
- Engineering Village
- Environmental Sciences and Pollution Management (includes conference proceedings)
- GeoRef
- GreenFILE
- History of Science, Technology, and Medicine
- INSPEC (includes conference proceedings)
- Materials Research Database with METADEX (includes conference proceedings)
- MathSciNet (includes conference proceedings)
- Mechanical Engineering Abstracts (includes conference proceedings)
- MEDLINE
- MicroPatent Materials Patents
- NTIS (National Technical Information Service)
- Oceanic Abstracts
- PapersFirst (conference proceedings, etc.)
- Plant Science
- Proceedings (conference proceedings, etc.)
- Safety Science and Risk
- Science Citation Index
- Solid State and Superconductivity Abstracts (includes conference proceedings)
- TOXLINE

### **Online Series**

- CRC Handbook of Chemistry & Physics
- CRC EngNetBase.

Undergraduate-Level Databases: Academic OneFile, Applied Science and Technology Full Text (includes conference proceedings), Biology Digest, General Science Full Text (includes conference proceedings), and OmniFile Full Text Mega (includes conference proceedings).

### **Management Databases**

- ABI/Inform (Full Text)
- Business & Industry (Full Text)
- Business Newsbank (Full Text)
- Business & Company Resource Center (Full Text)
- General Business File ASAP (Full Text)
- Business Full Text

### **Books**

The book approval plan has a broad subject parameter to receive all titles on *contemporary social or public policy aspects of science, engineering, and technology*, and all engineering handbooks.

For the PhD and the management programs of the College of Engineering and Computing the library receives through the approval plan advanced academic-level books with notification slips for professional-level books. Such programs include mechanical engineering, general technology, biomedical engineering, civil engineering, electrical engineering, electronics, and nuclear engineering.

The library relies on notification slips for direct orders for the following (non-PhD) programs: hydraulic engineering, environmental technology, highway engineering, railroad engineering, bridge engineering, motor vehicles, building construction, aeronautics, mining engineering, and chemical technology.

Of the library's approximately 60,000 NetLibrary e-books, eight are on *electrical engineering*; 38 on *computer engineering*; 438 on *engineering*; and 322 on *computer science* generally.

Both campus libraries have expansive budgets for faculty orders of library materials.

### **Faculty-Library Relations**

The College of Engineering and Computing has a Library Committee with 13 members: eight faculty, two associate library directors, the engineering librarian, and the head of access services.

It meets at least once a semester, more often when college-wide oversight would be useful for certain projects. For example, the Committee met often in 2008 for a journal review of the PhD program in Material Science, a journal review for Computer Science, and to compile supporting documents for the library's acquisition of the IEEE Electronic Library. In 2009 the Committee completed the review of all other print journals, converting some to online and canceling other titles that were deemed non-essential.

Engineering Library Services at the Engineering Center provides access to many dictionaries, encyclopedias, handbooks and other reference materials relevant to Electrical and Computer Engineering.

Table 1: FIU Online-journal Counts for Engineering and Applied Sciences

- Applied Mathematics (60)
- Applied Physics (88)
- Chemical & Materials Engineering
  - Chemical Engineering (299)
  - Materials Science (130)
- Civil & Environmental Engineering
  - Civil Engineering (259)
  - Environmental Engineering (88)
  - Ocean Engineering (4)
  - Operations Research (58)
  - Transportation Engineering (68)
- Computer Science (747)
- Electrical & Computer Engineering
  - Electrical Engineering (693)
  - Information Technology (61)
  - Telecommunications (255)
- Engineering - General (167)
- Mechanical Engineering
  - Aeronautics Engineering & Astronautics (99)
  - Automotive Engineering (60)
  - Bioengineering (81)
  - Hydraulic Engineering (15)
  - Industrial & Management Engineering (279)
  - Mechanical Engineering - General (193)
  - Metallurgy & Mineralogy (120)
  - Mining Engineering (62)
  - Nuclear Engineering (34)
- Technology - General (209)

Table 2

Citation-ranked Literature of OPERATIONS RESEARCH & MANAGEMENT SCIENCE	APRIL 2009
Scope note: Operations Research & Management Science includes resources on the definition, analysis, and solution of complex problems. Relevant topics in this category include mathematical modeling, stochastic modeling, decision theory and systems, optimization theory, logistics, and control theory.	
Title	FIU (blank = yes)
PRODUCTION AND OPERATIONS MANAGEMENT	In several aggregator databases up to but not including the current year
TRANSPORTATION RESEARCH PART B-METHODOLOGICAL	
MANAGEMENT SCIENCE	
JOURNAL OF OPERATIONS MANAGEMENT	
SYSTEMS & CONTROL LETTERS	
MATHEMATICAL PROGRAMMING	
OPERATIONS RESEARCH	
TRANSPORTATION SCIENCE	
OMEGA-INTERNATIONAL JOURNAL OF MANAGEMENT SCIENCE	
JOURNAL OF QUALITY TECHNOLOGY	
EXPERT SYSTEMS WITH APPLICATIONS	
COMPUTERS & OPERATIONS RESEARCH	
DECISION SUPPORT SYSTEMS	
EUROPEAN JOURNAL OF OPERATIONAL RESEARCH	
RELIABILITY ENGINEERING & SYSTEM SAFETY	
TECHNOVATION	
JOURNAL OF SCHEDULING	NO
TRANSPORTATION RESEARCH PART E-LOGISTICS AND TRANSPORTATION REVIEW	
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH	
INFORMS JOURNAL ON COMPUTING	

MATHEMATICAL METHODS OF OPERATIONS RESEARCH	
COMPUTATIONAL OPTIMIZATION AND APPLICATIONS	
QUEUEING SYSTEMS	
JOURNAL OF GLOBAL OPTIMIZATION	
IIE TRANSACTIONS	
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY	
OPTIMAL CONTROL APPLICATIONS & METHODS	
JOURNAL OF INDUSTRIAL AND MANAGEMENT OPTIMIZATION	NO
INTERNATIONAL JOURNAL OF INFORMATION TECHNOLOGY & DECISION MAKING	NO
OPTIMIZATION AND ENGINEERING	NO
JOURNAL OF OPTIMIZATION THEORY AND APPLICATIONS	
NETWORKS	
PROBABILITY IN THE ENGINEERING AND INFORMATIONAL SCIENCES	
INTERFACES	
ENGINEERING OPTIMIZATION	NO
OR SPECTRUM	NO
PRODUCTION PLANNING & CONTROL	NO
INTERNATIONAL JOURNAL OF PRODUCTION RESEARCH	
OPTIMIZATION METHODS & SOFTWARE	NO
NAVAL RESEARCH LOGISTICS	
DISCRETE EVENT DYNAMIC SYSTEMS-THEORY AND APPLICATIONS	
ANNALS OF OPERATIONS RESEARCH	
OPERATIONS RESEARCH LETTERS	
NETWORKS & SPATIAL ECONOMICS	NO
DISCRETE EVENT DYNAMIC SYSTEMS-THEORY AND APPLICATIONS	NO
INTERNATIONAL JOURNAL OF SYSTEMS SCIENCE	NO
CONCURRENT ENGINEERING-RESEARCH AND APPLICATIONS	

INTERNATIONAL JOURNAL OF FLEXIBLE MANUFACTURING SYSTEMS	
SAFETY SCIENCE	
OPTIMIZATION METHODS & SOFTWARE	NO
MATHEMATICAL METHODS OF OPERATIONS RESEARCH	NO
INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	
APPLIED STOCHASTIC MODELS IN BUSINESS AND INDUSTRY	
INTERNATIONAL JOURNAL OF COMPUTER INTEGRATED MANUFACTURING	
INFOR	
ASIA-PACIFIC JOURNAL OF OPERATIONAL RESEARCH	
MILITARY OPERATIONS RESEARCH	NO
JOURNAL OF THE OPERATIONS RESEARCH SOCIETY OF JAPAN	
RAIRO-RECHERCHE OPERATIONNELLE-OPERATIONS RESEARCH	NO
JOURNAL OF MANUFACTURING SYSTEMS	
FIU has 44 (73%) of the 60 titles. Five years ago, FIU had 17 (28%).	

Table 3

Citation-ranked literature of MANAGEMENT	APRIL 2009
TITLES	FIU (blank = yes)
ADMINISTRATIVE SCIENCE QUARTERLY	
ACADEMY OF MANAGEMENT REVIEW	
ACADEMY OF MANAGEMENT JOURNAL	
STRATEGIC MANAGEMENT JOURNAL	
LEADERSHIP QUARTERLY	
HARVARD BUSINESS REVIEW	
ORGANIZATION SCIENCE	
MIS QUARTERLY	
MIT SLOAN MANAGEMENT REVIEW	
MANAGEMENT SCIENCE	
CALIFORNIA MANAGEMENT REVIEW	

JOURNAL OF MANAGEMENT RESEARCH POLICY	
ORGANIZATIONAL BEHAVIOR AND HUMAN DECISION PROCESSES	
INFORMATION & MANAGEMENT	
JOURNAL OF ORGANIZATIONAL BEHAVIOR MANAGEMENT	
HUMAN RESOURCE MANAGEMENT	
ORGANIZATION STUDIES	
JOURNAL OF INTERNATIONAL BUSINESS STUDIES	
HUMAN RELATIONS	
ORGANIZATIONAL DYNAMICS	
NEW TECHNOLOGY WORK AND EMPLOYMENT	NO
GROUP & ORGANIZATION MANAGEMENT	
DECISION SCIENCES	
JOURNAL OF PRODUCT INNOVATION MANAGEMENT	
INTERNATIONAL JOURNAL OF FORECASTING	
INTERNATIONAL JOURNAL OF SELECTION AND ASSESSMENT	
MANAGEMENT LEARNING	
INTERNATIONAL JOURNAL OF OPERATIONS & PRODUCTION MANAGEMENT	
JOURNAL OF MANAGEMENT STUDIES	
ORGANIZATION	NO
SYSTEM DYNAMICS REVIEW	
JOURNAL OF FORECASTING	
INDUSTRIAL MARKETING MANAGEMENT	
JOURNAL OF INFORMATION TECHNOLOGY	NO
JOURNAL OF MANAGEMENT INQUIRY	NO
NEGOTIATION JOURNAL-ON THE PROCESS OF DISPUTE SETTLEMENT	
OMEGA-INTERNATIONAL JOURNAL OF MANAGEMENT SCIENCE	
ADVANCES IN STRATEGIC MANAGEMENT : A RESEARCH ANNUAL	NO
JOURNAL OF THE OPERATIONAL RESEARCH SOCIETY	
R & D MANAGEMENT	
LONG RANGE PLANNING	

JOURNAL OF ECONOMICS & MANAGEMENT STRATEGY	
IEEE TRANSACTIONS ON ENGINEERING MANAGEMENT	
INTERFACES	
SYSTEMIC PRACTICE AND ACTION RESEARCH	
REVIEW OF INDUSTRIAL ORGANIZATION	
JOURNAL OF MANAGEMENT INFORMATION SYSTEMS	
TOTAL QUALITY MANAGEMENT	NO
GROUP DECISION AND NEGOTIATION	NO
JOURNAL OF SMALL BUSINESS MANAGEMENT	
SYSTEMS RESEARCH AND BEHAVIORAL SCIENCE	
RESEARCH-TECHNOLOGY MANAGEMENT	
TOURISM MANAGEMENT	
SERVICE INDUSTRIES JOURNAL	
JOURNAL OF ORGANIZATIONAL CHANGE MANAGEMENT	
INTERNATIONAL JOURNAL OF SERVICE INDUSTRY MANAGEMENT	
INTERNATIONAL JOURNAL OF TECHNOLOGY MANAGEMENT	
INTERNATIONAL JOURNAL OF MANPOWER	
CANADIAN JOURNAL OF ADMINISTRATIVE SCIENCES-REVUE CANADIENNE DES SCIENCES DE L ADMINISTRATION	
<p>FIU has 53 (88%) of the 60, including 100% of the top third (20 titles) and 88% of the top two-thirds (35 of those 40 titles). Five years ago, FIU had 51 (85%).</p>	