

**Proposed Curriculum Framework**  
**Bachelor of Library and Information Science (B.Lib.I.Sc.)**  
**University of Engineering & Management (UEM), Jaipur**

(NEP 2020 Aligned | ICT-Enabled | Research & Industry Oriented | Effective from Academic Session 2026–27)

Programme Duration: 1 Year (2 Semesters)

Total Credits: 40 Credits (20 Credits per Semester)

Eligibility: Bachelor's Degree in any discipline from a recognized university with minimum prescribed eligibility.

The proposed curriculum has been designed by benchmarking contemporary NEP-based B.Lib.I.Sc. programmes and integrating traditional library science with digital librarianship, artificial intelligence, data management, library automation, and research support services.

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Programme Educational Objectives (PEOs)

Graduates will be able to:

- \* Organize and manage academic, public, special, and digital libraries.
- \* Apply international standards of classification, cataloguing, indexing, and metadata creation.
- \* Manage library automation systems and institutional repositories.
- \* Provide information services using ICT, AI, and digital resources.
- \* Develop modern knowledge management systems.
- \* Support research, innovation, scholarly communication, and digital learning.
- \* Pursue higher education (M.Lib.I.Sc., Ph.D.) and careers in library, information, and knowledge management sectors.

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Programme Outcomes (POs)

On completion of the programme, graduates will be able to:

- \* Apply principles of Library and Information Science.
  - \* Organize print and digital knowledge resources efficiently.
  - \* Design and manage automated library systems.
  - \* Deliver user-centric information services.
  - \* Apply ICT, AI, cloud technologies, and digital repositories.
  - \* Promote research integrity and scholarly communication.
  - \* Manage library administration professionally and ethically.
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## Semester I (20 Credits)

| Course                                                             | Credits |
|--------------------------------------------------------------------|---------|
| Foundations of Library & Information Science                       | 4       |
| Knowledge Organization: Library Classification (Theory & Practice) | 4       |
| Library Cataloguing (Theory & Practice)                            | 4       |
| Information Sources, Systems and Services                          | 3       |
| ICT Fundamentals for Libraries                                     | 3       |
| Library Visit & Practical Assignment                               | 2       |

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## Course Outline

### 1. Foundations of Library & Information Science

- \* Evolution of Libraries
- \* Five Laws of Library Science
- \* Types of Libraries
- \* Information Society
- \* Knowledge Society
- \* Library Legislation
- \* National Knowledge Commission
- \* National Digital Library

- \* Intellectual Freedom
  - \* Library Ethics
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## 2. Knowledge Organization: Classification

### Theory

- \* Universe of Knowledge
- \* Classification Principles
- \* Colon Classification
- \* Dewey Decimal Classification (DDC)
- \* Universal Decimal Classification
- \* Facet Analysis
- \* Call Number Construction

### Practical

- \* Classification of books
  - \* Schedule use
  - \* Number building
  - \* Practical exercises using DDC
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## 3. Library Cataloguing

### Theory

- \* Objectives
- \* AACR-II
- \* RDA (Introduction)
- \* MARC 21
- \* Metadata Standards
- \* OPAC
- \* Union Catalogue

## Practical

- \* Main Entry
  - \* Added Entries
  - \* Book Cataloguing
  - \* OPAC Searching
  - \* MARC Record Preparation
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## 4. Information Sources, Systems and Services

- \* Reference Sources
  - \* Bibliographies
  - \* Encyclopedias
  - \* Dictionaries
  - \* Databases
  - \* Information Centres
  - \* Documentation Services
  - \* CAS
  - \* SDI
  - \* Literature Search
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## 5. ICT Fundamentals

- \* Computer Fundamentals
- \* Operating Systems
- \* Internet Technologies
- \* Networking Basics
- \* Database Concepts
- \* Cloud Computing
- \* Cyber Security
- \* Digital Literacy

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## Semester II (20 Credits)

| Course                                                  | Credits |
|---------------------------------------------------------|---------|
| Library Management & Administration                     | 4       |
| Digital Libraries & Library Automation                  | 4       |
| Information Retrieval, Research Support & Bibliometrics | 4       |
| Knowledge Management, AI & Emerging Technologies        | 3       |
| Internship / Field Work                                 | 3       |
| Seminar & Viva Voce                                     | 2       |

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### Course Outline

#### 1. Library Management

- \* Principles of Management
  - \* Human Resource Management
  - \* Financial Management
  - \* Budgeting
  - \* Collection Development
  - \* Preservation
  - \* Library Buildings
  - \* Marketing of Library Services
  - \* Leadership
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#### 2. Digital Libraries & Automation

- \* Digital Libraries
- \* Institutional Repositories
- \* Open Access
- \* Open Educational Resources
- \* Digital Preservation

- \* Library Automation
  - \* KOHA
  - \* SOUL
  - \* DSpace
  - \* RFID Technology
  - \* Barcode Systems
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### 3. Information Retrieval & Research Support

- \* Information Retrieval Systems
  - \* Search Strategies
  - \* Citation Databases
  - \* Scopus
  - \* Web of Science
  - \* Google Scholar
  - \* Bibliometrics
  - \* Altmetrics
  - \* Plagiarism Detection
  - \* Research Data Management
  - \* Reference Management Software (Zotero, Mendeley)
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### 4. Knowledge Management & AI

- \* Knowledge Management
- \* Artificial Intelligence in Libraries
- \* Chatbots
- \* Machine Learning Applications
- \* Semantic Web
- \* Big Data
- \* Blockchain in Libraries
- \* Digital Curation
- \* Learning Analytics
- \* Smart Libraries

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## 5. Internship

Students shall undergo a 6-week internship in:

- \* University Libraries
- \* Digital Libraries
- \* Corporate Knowledge Centres
- \* Research Institutes
- \* Government Libraries
- \* Public Libraries

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## Practical Components

Students will receive hands-on training in:

- \* DDC Classification
  - \* Colon Classification
  - \* AACR-II
  - \* RDA
  - \* MARC21
  - \* KOHA
  - \* SOUL
  - \* DSpace
  - \* RFID Applications
  - \* OPAC Searching
  - \* Digital Repository Development
  - \* Institutional Repository Creation
  - \* Library Website Development
  - \* Bibliographic Databases
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## Software Training

Students will receive practical exposure to:

- \* KOHA
  - \* SOUL 3.0
  - \* DSpace
  - \* Greenstone
  - \* Zotero
  - \* Mendeley
  - \* EndNote (Introduction)
  - \* MS Excel
  - \* MS Access
  - \* Power BI
  - \* Google Workspace
  - \* AI Tools for Information Retrieval and Knowledge Management
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## Internship Structure

Duration: 6 Weeks

### Suggested Industry Partners

- \* National Digital Library of India (NDLI)
- \* DELNET
- \* INFLIBNET Centre
- \* UGC-INFONET / e-ShodhSindhu
- \* IIT Libraries
- \* NIT Libraries
- \* IISER Libraries
- \* DRDO Libraries
- \* CSIR Libraries
- \* State Central Libraries
- \* Corporate Knowledge Centres
- \* UEM Jaipur Central Library

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## Skill Enhancement Certifications

Students should complete certifications in:

- \* KOHA Library Automation
- \* DSpace Repository Management
- \* Research Data Management
- \* Bibliometrics
- \* Digital Library Management
- \* AI for Libraries
- \* Academic Writing & Referencing
- \* Information Literacy
- \* Cyber Security
- \* Digital Preservation

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## Assessment Pattern

- \* Continuous Internal Assessment: 40%
- \* End Semester Examination: 60%

Assessment components include:

- \* Practical exercises
- \* Classification records
- \* Cataloguing assignments
- \* Case studies
- \* Software-based practicals
- \* Library survey
- \* Seminar presentations
- \* Internship report
- \* Viva voce

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## Career Opportunities

Graduates can pursue careers as:

- \* Librarian
- \* Assistant Librarian
- \* Digital Librarian
- \* Knowledge Manager
- \* Information Officer
- \* Documentation Officer
- \* Library Automation Specialist
- \* Metadata Librarian
- \* Institutional Repository Manager
- \* Research Support Executive
- \* Digital Archivist
- \* Corporate Information Manager
- \* Information Consultant
- \* Academic Library Professional

They can also pursue M.Lib.I.Sc., M.A./M.Sc. in Information Science, Ph.D. in Library & Information Science, and qualify for UGC-NET/JRF and other academic and professional opportunities.

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## Distinctive Features for UEM Jaipur

To make the programme nationally competitive, UEM Jaipur can establish:

- \* Centre for Digital Libraries and Knowledge Management.
- \* AI & Smart Library Innovation Laboratory featuring AI-powered cataloguing, chatbots, semantic search, and intelligent information retrieval.
- \* Mandatory hands-on training in KOHA, SOUL, DSpace, RFID, MARC21, RDA, Zotero, and Mendeley.

- \* Annual UEM Library Innovation Summit with librarians, publishers, and information professionals.
- \* Collaboration with INFLIBNET, DELNET, National Digital Library of India (NDLI), e-ShodhSindhu, IITs, NITs, and leading university libraries.
- \* Industry projects on digital repositories, institutional knowledge management, bibliometric analysis, and research information systems.
- \* Integration of AI, cloud computing, digital preservation, open science, research data management, and scholarly communication, preparing graduates for next-generation library and information services.

This curriculum blends the classical foundations of Library and Information Science with emerging technologies, digital transformation, and research support, ensuring graduates are equipped to lead modern academic, public, corporate, and digital library ecosystems.