LIS EDUCATION IN TRANSITION : CURRICULUM OF USA & INDIA

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Abstract: - *This study presents a comparative analysis of Library and Information Science (LIS) curricula from ten leading universities five each from the United States and India to assess their alignment with evolving professional demands shaped by digital transformation and user-centric service models. Using purposive sampling, curricula were examined through official university documents and organized into ten thematic clusters, including Library Systems, Information and Communication Technology, Knowledge Organization, and Emerging Trends. The analysis focused on four key dimensions: curriculum structure, pedagogical approaches, faculty strength, and accreditation frameworks. Findings reveal a marked divergence between the two countries. U.S.A., LIS programs adopt flexible, student-centric curricula with extensive electives, interdisciplinary learning opportunities, stronger faculty resources, and continuous innovation supported by ALA accreditation. In contrast, Indian LIS programs remain predominantly core-oriented, with limited electives, lower faculty strength, and accreditation governed by the UGC, offering minimal industry engagement. Notably, critical areas such as library legislation and emerging technologies receive insufficient attention in Indian curricula, highlighting a disconnect between academic training and professional practice. The study emphasizes the urgent need for curriculum reform in India through increased flexibility, faculty expansion, industry-integrated accreditation, and incorporation of global best practices to enhance graduate employability and global relevance.*

Keywords:- LIS Education; Library Professional; Curriculum; India; United States of America.

1. INTRODUCTION

The landscape of information access and dissemination has transformed dramatically over the past two decades, driven by advances in digital technologies, the rise of social media, and the growing reliance on artificial intelligence. As a result, the role of Library and Information Science (LIS) professionals has expanded far beyond traditional boundaries. No longer limited to managing physical collections or reference services, LIS practitioners are now expected to facilitate digital literacy, manage complex metadata systems, ensure information integrity, and navigate the ethical challenges of a

knowledge society shaped by algorithms and misinformation (Raju, 2020); (Pawley, 2019) The modern information environment requires LIS curricula to respond with agility and foresight. As (Markey, 2004) argues, LIS education must move beyond overspecialization and reclaim leadership in areas like content curation, preservation, and authoritative knowledge production. Meanwhile, (Raju, 2020), using Abbott's "Chaos of Disciplines" framework, highlights the need for interdisciplinary competencies such as data analytics, information systems design, and digital governance that equip LIS graduates to thrive in hybrid roles overlapping with computer science, communication, and policy studies.

Despite advances in information technology, LIS curricula across many countries remain tethered to outdated models. Are today's LIS graduates equipped with the competencies needed to engage digitally-native users, manage complex data systems, and uphold ethical information stewardship?

The evolution of LIS education from Melvil Dewey's practical training in the late 19th century to Dr. S.R. Ranganathan's foundational work in India, has always reflected the needs of the era. However, the 21st century demands a fresh lens: one that embraces interdisciplinarity, data literacy, digital ethics, and agile pedagogy.

Given these divergent trends, a cross-national comparative analysis becomes essential. This study examines and evaluates LIS curricula from selected universities in the USA and India, with a focus on course structure, thematic distribution, and the representation of emerging competencies. The goal is to assess the degree to which these programs prepare graduates for the contemporary information ecosystem, identify curricular gaps, and propose areas for reform particularly in light of the growing demand for digitally fluent, ethically grounded, and globally aware LIS professionals.

2. LITERATURE REVIEW

Library and Information Science (LIS) education is undergoing a transformative shift, driven by rapid advancements in technology, growing interdisciplinarity, and evolving user needs. A detailed review of the literature highlights several critical developments and persistent challenges in the design and delivery of LIS curricula globally, with a particular focus on India.

Chung, Schalk, & Schalk, 2024, conducted a comprehensive analysis of the statistical reports from the Association for Library and Information Science Education (ALISE) spanning 1997 to 2020. Their study revealed that LIS programs in North America have increasingly diversified, now offering specialized concentrations and certificate options. Emerging courses include data science, digital humanities, and health informatics, reflecting the changing demands of the information profession. While core requirements have been reduced, foundational subjects such as knowledge organization, research methods, and fundamental LIS concepts remain central. This trend is evident across both iSchools and non-iSchools, indicating a growing commitment to

interdisciplinarity and readiness for evolving information landscapes.

In contrast, Khanchandani, 2021 examined the landscape of LIS education in India, uncovering systemic issues such as inconsistency in course structures, inadequate faculty and infrastructure, and a widening gap between the number of trained LIS professionals and industry demands. The transition from traditional to digital libraries necessitates a reorientation of LIS education towards IT competencies. Despite discussions around integrating new technologies and multidisciplinary approaches, India's curriculum reform remains stagnant, with the last major UGC committee meeting on LIS education held in 2001. This disconnect underscores the urgency for curriculum modernization.

The importance of social and cultural dimensions in LIS education is underscored by Alajmi & Alshammari, 2020, who analyzed 84 syllabi from 19 ALA-accredited MLIS programs in the U.S. and Canada. Their study found that while diversity-related topics especially concerning age groups such as children and young adults were moderately represented, critical areas such as gender, disability, and ethnicity were underexplored. They advocate for continual updates to LIS curricula to foster inclusive and socially responsive information services, ensuring graduates are equipped to serve complex and diverse user communities.

From an employability perspective, Nayek & Bhattacharya, 2016 conducted a comparative study of five LIS institutions in India - University of Calcutta, Jadavpur University, Rabindra Bharati University, DRTC, and IGNOU. Their findings reveal that although institutions are introducing new topics, there remains a dominant emphasis on traditional subjects. The study points to a lack of alignment between LIS education and professional requirements, emphasizing the need for accountability, practical training, and the incorporation of emerging information practices to bridge the skill gap in India's knowledge economy.

Historical perspectives on LIS education in India are provided by Yadav & Gohain, 2015s who traced its development from the early 20th century to the present. Noting the establishment of pioneering LIS schools in Baroda (1911) and Punjab (1915), they highlight subsequent milestones in curriculum expansion, interdisciplinary orientation, and the growth of distance education. Despite significant progress, the sector continues to struggle with challenges such as lack of standardization, accreditation, and uneven infrastructure, which hamper its responsiveness to 21st-century information needs.

Choi, Sang-Ki, Ahn, In-Ja, Noh, Younghee, & Kim, 2013 offer a model for curriculum standardization, drawing on syllabi from 39 Korean LIS departments and 28 international universities. They developed standard course content for six core subjects: Introduction to LIS, Information Organization, Information Services, Library Management, Information Retrieval, and Field Studies. These proposed syllabi, validated by academic and professional experts, integrate

domestic and global perspectives as well as job market analysis. The study serves as a blueprint for harmonizing core course delivery to ensure consistent training of LIS professionals across institutions.

Walia & Siddiqui, 2013 provided a comparative analysis of postgraduate LIS education in India and the UK. Examining program structures, teaching methods, course content, and evaluation systems, they found significant differences. The study recommends harmonizing key aspects such as program nomenclature and pedagogical strategies in India to align with global standards and better prepare students for modern LIS roles, particularly those involving digital and interdisciplinary expertise.

A deeper look into curriculum transformation in the digital era is offered by Mahapatra, 2006, who identified emerging paradigms and challenges for LIS education in India. He stresses that the digital revolution demands new competencies among LIS professionals, particularly in ICT, digital content management, and online service delivery. However, this shift is hindered by resistance to change, lack of IT-trained faculty, and poor infrastructure. Mahapatra proposes reforms such as enhanced research orientation, integration of e-learning, and collaboration with industry to modernize LIS education and make it more responsive to technological shifts.

Extending the discussion to Africa, Aina, 2005 critiques the Western-influenced LIS curricula that dominate African education systems. He argues for a reimagined curriculum tailored to the African information environment, proposing a three-pronged approach: foundational LIS skills for traditional library settings, ICT and management modules for the broader information market, and community-focused content for serving rural and underserved populations. By comparing the proposed model with curricula at the University of Botswana, University of Ghana, and Moi University (Kenya), Aina emphasizes the need for localized, relevant, and diversified LIS education across the continent.

This literature reviews reveals that LIS education is evolving to meet technological and interdisciplinary demands, with programs increasingly offering courses like data science and digital humanities alongside core subjects. However, challenges remain, especially in India, due to outdated curricula and resource gaps. Researchers emphasize the need to blend digital skills with traditional values, promote lifelong learning, and strengthen collaboration among educators and industry to build a balanced, future-ready curriculum.

3. AIMS

The current study attempts to:

1. Determine the curriculum and paedegogy followed by select LIS schools in USA and India.
2. Categorise the courses offered under ten cluster terms
3. Compare the subject cluster term both at spatial and instituitional levels
4. Identify the gaps, overlays and emerging trends in the LIS arena

4.METHODOLOGY

4.1. Research Design

This study employed a qualitative comparative content analysis to examine and contrast the Library and Information Science (LIS) curricula of selected universities in the United States and India.

4.2. Sampling Strategy

A **purposive sampling approach** was used to select universities that met the following criteria:

1. Academic reputation and long-standing LIS programs
2. Accreditation by recognized national bodies (ALA for USA; UGC for India)
3. Availability of complete curriculum documentation online
4. Representation of diverse program types (traditional LIS, informatics-oriented, research-intensive, etc.)

Based on these criteria, ten universities - five from the USA and five from India were selected. The goal is to compare and evaluate the similarities and gaps in LIS education between a developed country (USA) and a developing one (India). The institutions selected include the University of Illinois at Urbana-Champaign, The University of North Carolina at Chapel hill, University of Texas at Austin, University of Arizona, and University of Washington situated at USA and University of Delhi, University of Mumbai, University of Madras, Pondicherry University, and DRTC representing India.

Table 1: List of chosen Universities and LIS Programmes offered

S.No.	University	Programme	Country	Accreditation	Year of Establishment
1.	University of Illinois	1. MS in Library & Information Science 2. MS in Information Management 3. Ph.D.	United States of America	ALA	1897
2.	University of Texas	1. M.S.I.S., (Master of Science in Information Security) 2. Ph.D	United States of America	ALA	1948
3.	University of Arizona	1. M.A in Library and Information Science 2. Ph.D.	United States of America	ALA	2015
4.	University of Washington	1. Informatics, 2. M.L.I.Sc., 3. M.S.I.M., 4. Ph.D	United States of America	ALA	1911
5.	The University of North	1. Informatics, 2. M.L.I.Sc.,	United States of	ALA	1931

	Carolina at Chapel hill	3. M.S.I.M., 4. Ph.D	America		
6.	University of Mumbai	1. M.Lib.I.Sc., 2. Ph.D.	India	UGC	1964
7.	University of Madras	1. M.Lib.I.Sc., 2. Ph.D.	India	UGC	1960
8.	DRTC	1. MS in Library and Information Science 2. Ph.D.	India	UGC	1962
9.	University of Delhi	1. B.L.I.Sc. 2. M.L.I.Sc. 3. M.Phil. 4. Ph.D	India	UGC	1946
10.	Pondicherry University	1. B.L.I.Sc. 2. M.L.I.Sc. 3. Ph.D	India	UGC	2007

All the institutions offer both Core and Elective Courses in the field of Library & Information Science, as represented in Table 2. The data collected was incorporated into a MS-Excel Working database titled 'LIS Curriculum'. This data was later grouped under 10 broad subject headings as listed under table 3.

4.3. Data Sources and Data Collection Procedure

Data were collected from publicly available institutional documents including:

- University websites
- Course catalogs
- Program brochures
- Archived syllabi (where available)

Each institution's curriculum was systematically downloaded and stored in a structured Excel.

The dataset captured the following details:

- Course titles
- Core and elective classification
- Credit structures
- Thematic focus areas

Table 2: Number of Elective, Core & Total Courses offered

S.No.	Name of the University	No. of Core Courses (C)	No. of Elective Courses (E)	Total Number of Courses (N)	Total no. of Credits required to complete course
1.	University of Illinois	2	82	84	50
2.	University of Texas	1	44	45	55
3.	University of Arizona	28	19	47	60
4.	University of Washington	4	54	58	63
5.	The University of North Carolina at Chapel hill	2	74	76	60
6.	University of Mumbai	15	4	19	96
7.	University of Madras	14	7	21	91
8.	DRTC	18	6	24	84
9.	University of Delhi	8	10	18	90
10.	Pondicherry University	16	10	26	90

5. Development of the Ten Cluster Framework

For systematic analysis, all courses were classified into **ten thematic clusters**: ILS, ICT, IPS, KOM, INS, RMS, IRS, LLN, ETD, and LMA.

The cluster framework was developed using a hybrid deductive–inductive process.

5.1. Deductive Stage

Foundational categories were drawn from:

- ALA Core Competencies for LIS Education
- UGC Model Curriculum (2001)
- Previous LIS curriculum taxonomies (Markey 2004; Choi et al., 2013)

The cluster terms were arranged in the decreasing order of the number of courses (Table 3).

Table 3: Core clusters

Cluster Code	Cluster Name	Number of Courses
ILS	Information & Library Society (ILS)	89
ICT	Information Communication Technology (ICT)	81
IPS	Information Products & Services (IPS)	72
KOM	Knowledge Organization and Management (KOM)	55
INS	Information Systems (INS)	29
RMS	Research Methodology & Statistics (RMS)	25
IRS	Information Retrieval System (IRS)	20
LLN	Library Legislation (LLN)	16
ETD	New & Emerging Trends (ETD)	16
LMA	Library Management & Administration	15

5.2. Inductive Stage

Course descriptions from the collected curricula were reviewed to identify emerging or modern thematic elements (e.g., AI, data science, digital curation), which were then integrated into the cluster definitions.

6. Analytical Techniques

Analysis was performed at two interconnected levels:

6.1. University-Level Analysis

Each university's curriculum was examined for:

- Total number of courses
- Core versus elective balance
- Credit distribution

Visualizations used included:

- Donut charts
- Comparative bar graphs
- Heat maps
- Radar charts (for country-level summarization)

6.2. Cluster-Level Analysis

Courses were aggregated within each cluster to identify:

- Dominant knowledge domains
- Areas of curricular underrepresentation
- Technological preparedness
- Attention to emerging LIS trends
- Cross-country similarities and contrasts

This provided a holistic understanding of the structural and thematic priorities in LIS education across the two regions.

6.3. Ethical Considerations

The study used only publicly accessible academic documents.

As no human participants were involved, formal ethical approval was not required. Institutional names, course titles, and curricular details were used accurately and respectfully to maintain academic integrity.

7. RESULTS

The curriculum was examined at two tiers: the University level and the Subject level. The initial phase of analysis concentrated on the University level, utilizing a donut chart to represent the course distribution among the selected institutions. As depicted in Figure 1 illustrates a notable emphasis on Elective courses in developed countries, where they make up nearly 90% of the curriculum. This structure provides students with increased flexibility to tailor their academic journey. In contrast, developing countries tend to prioritize Core courses, offering fewer Elective options.

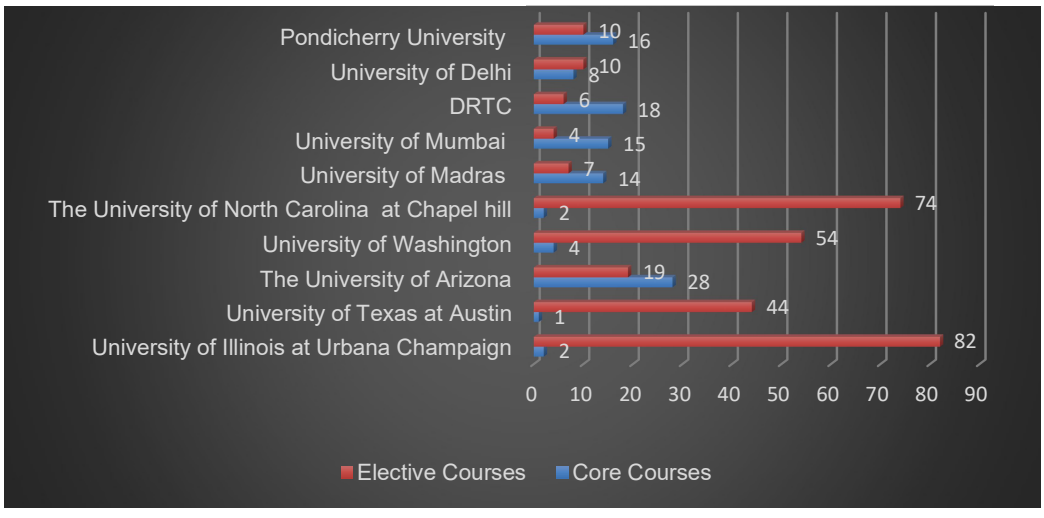

Figure 1: No of Courses offered by all Universities

Figure 2 clearly points out, that The University of Illinois in the United States leads with 84 courses, followed by the University of North Carolina at Chapel hill with 76. In India, the Documentation Research and Training Centre (DRTC) offers 24 courses, while the University of Mumbai offers 19. Figure 2 presents the breakdown of these courses into Core and Elective categories.

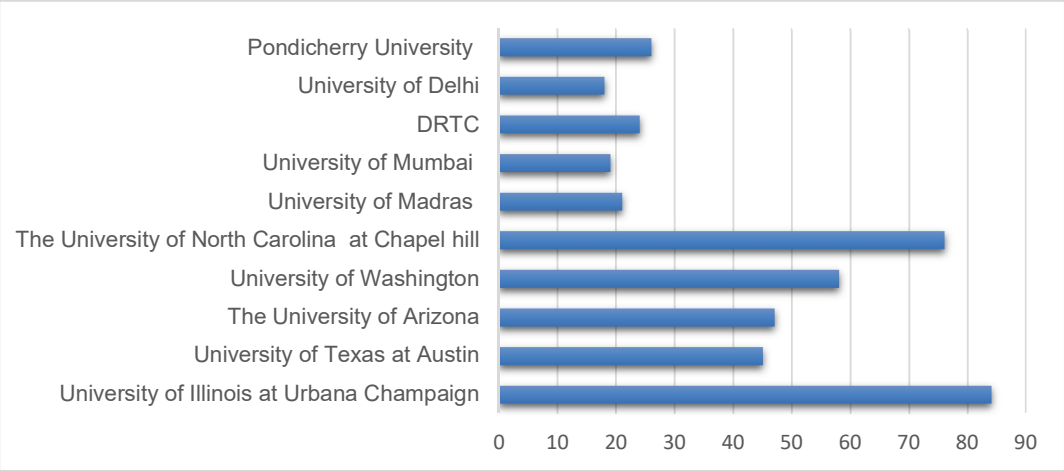

Figure 2: No of Courses offered by all Universities

The subsequent phase of the analysis focused on examining the specific subjects offered both mandatory and optional. Using cluster terms, the study categorized the curricula of universities from both developed and developing nations to identify patterns in the structure and content of LIS programs. Figures 3 to 12 present data showcasing how various subjects are distributed at the university level.

7.1. University Wise distribution of subject clusters

7.1.1. University of Illinois

Figure 3: Course Cluster Distribution - University of Illinois

The University of Illinois, a leading institution in Library and Information Science, offers a robust curriculum with 86 courses. As shown in Figure 3, 23 of these fall under the Information and Library Society (ILS) cluster, highlighting its core focus. The university also emphasizes Information and Communication Technology (ICT) with 19 courses and Information Products and Services (IPS) with 16. However, areas like Library Management and Automation (LMA) receive minimal attention, with only one course, and Library Legislation (LLN) is entirely absent. This distribution reflects a strategic shift toward emerging and technical domains in LIS education.

7.1.2. University of Texas

As shown in Figure 4, the University of Texas places strong emphasis on key areas like Library and Information Science (ILS), Information Products and Services (IPS), and Knowledge Organization and Metadata (KOM). The curriculum includes 1 core and 44 elective courses, offering students broad exposure to various LIS domains. ILS is a major focus, featuring topics like collection management and user services, while IPS and KOM cover areas such as digital libraries, health information, and information architecture. However, Library Legislation (LLN) and Information Retrieval Systems (IRS) receive little to no attention, indicating a curriculum geared more toward practical and organizational aspects rather than legal or technical foundations.

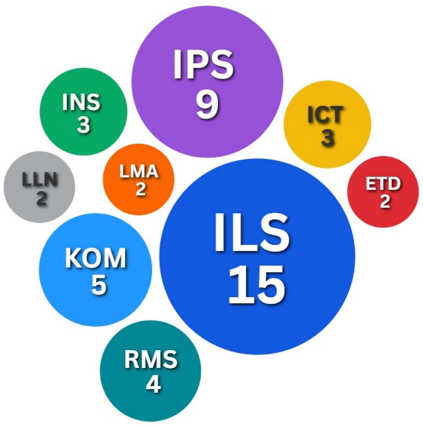

Figure 4: Course Cluster Distribution - University of Texas at Austin

7.1.3. University of Arizona

The University of Arizona offers a comprehensive Library Science program with 47 courses, including 29 core subjects. Key areas covered include research methods, ethical issues, and foundational information services. The largest cluster is Information and Library Society (ILS) with 9 courses, highlighting a strong focus on topics like scholarly communication and the history of books. In contrast, technical areas like Information Retrieval Systems (IRS) receive minimal attention, with only one course. Electives cover diverse subjects such as metadata management, information quality, and social justice, with some attention

to emerging areas like digital curation. Overall, the program emphasizes broad-based knowledge with a strong foundation in general information services.

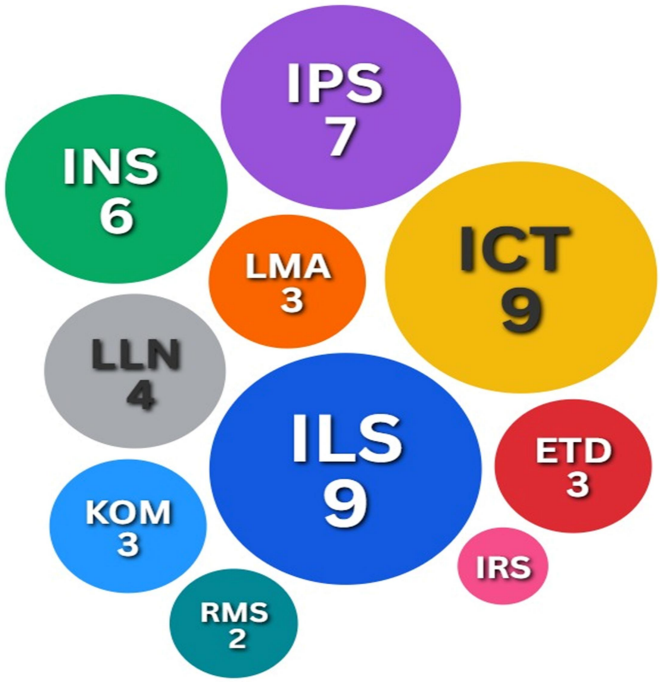

Figure 5: Course Cluster Distribution - University of Arizona

7.1.4. University of Washington

The University of Washington offers a well-rounded Library Science program with 59 courses—4 core and 54 electives. Core subjects include knowledge management, cataloging, and data science, providing a solid foundation. Electives are concentrated in Information and Library Society (ILS) and Information Products and Services (IPS), each with 13 courses covering topics like youth development, digital information behavior, intellectual freedom, and social justice. Notably, there are no courses in Library Management and Administration (LMA), indicating the university's focus on contemporary and data-driven areas over traditional management topics.

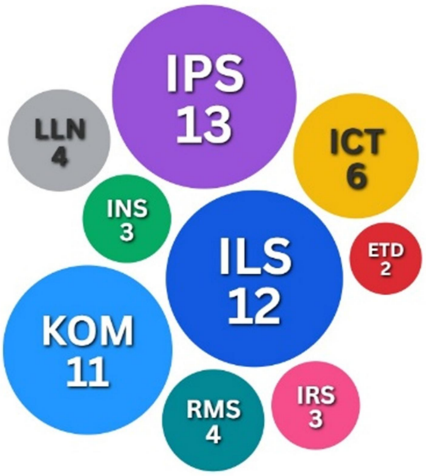

Figure 6: Course Cluster Distribution - University of Washington

7.1.5. The University of North Carolina at Chapel Hill

The University of North Carolina at Chapel Hill offers a balanced Library and Information Science curriculum that covers both core and emerging areas. As shown in Figure 7, the university emphasizes Information Products and Services (IPS) with 16 courses, followed by Knowledge Organization and Management (KOM) and Information and Communication Technology (ICT) with 14 each. Information and Library Society (ILS) is also well represented with 10 courses. Traditional areas like Library Management and Automation (LMA) and Information Retrieval Systems (IRS) have moderate coverage with 4 courses each, while subjects like Electronic Theses and Dissertations (ETD), Research Methodology (RMS), and Library Legislation (LLN) receive minimal focus. Overall, the curriculum reflects a strategic balance between foundational LIS areas and modern, tech-driven topics.

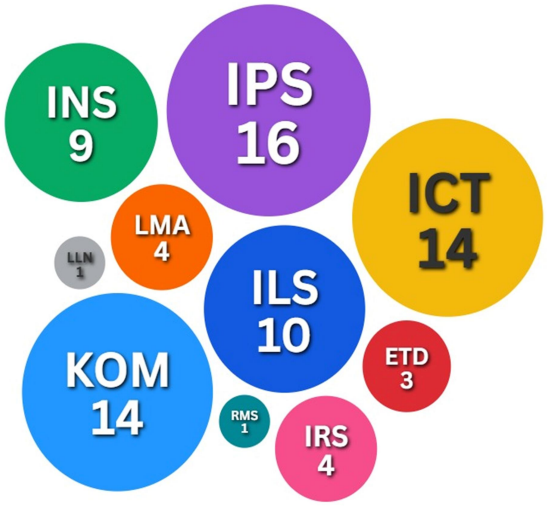

Figure 7: Course Cluster Distribution: The University of North Carolina at Chapel Hill

7.1.6. University of Mumbai

Established in 1857, the University of Mumbai is one of India's oldest and most esteemed institutions. Its Library Science program offers 15 core and 4 elective courses, emphasizing foundational knowledge. As shown in Figure 8, the curriculum focuses heavily on Knowledge Organization and Management (KOM) with 5 courses, and Information and Communication Technology (ICT) through subjects like digital libraries and computer applications. However, it lacks coverage in areas such as Information Systems (INS), Emerging Trends (ETD), and Library Legislation (LLN), highlighting a gap in addressing modern developments. Thenprogram leans toward traditional and technical skills, providing a strong core foundation but limited exposure to evolving LIS fields.

Figure 8: Course Cluster Distribution: University of Mumbai

7.1.7. University of Madras

The University of Madras, known as the birthplace of Library Science in India under Dr. S.R. Ranganathan, offers a well-structured program with 14 core and 7 elective courses. It maintains a balanced focus, particularly in Knowledge Organization and Management (KOM) and Information and Communication Technology (ICT), with courses like Web Technology and Digital Libraries. Electives such as Knowledge Management and Marketing of Information add practical value. However, the absence of courses in Emerging Trends (ETD) and Library Legislation (LLN) reflects a gap in addressing evolving global standards.

Figure 9: Course Cluster Distribution: University of Madras

7.1.8. DRTC

Established in 1962 by Dr. S.R. Ranganathan, the Documentation Research and Training Centre (DRTC) at the Indian Statistical Institute, Bangalore, is a key research hub in Library and Information Science. Its curriculum includes 18 core and 6 elective courses, with a strong focus on Information and Communication Technology (ICT), comprising 11 courses on topics like web-based systems and the semantic web. As shown in Figure 10, Knowledge Organization and Management (KOM) follows with 3 courses. However, areas like Library Legislation (LLN) and Information Systems (INS) receive minimal attention, reflecting a broader trend in developing countries that may hinder addressing legal and policy aspects in LIS.

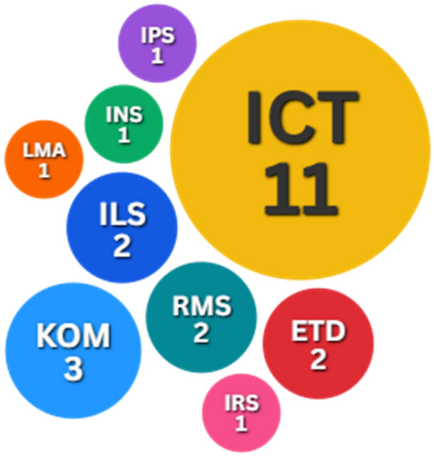

Figure 10: Course Cluster Distribution: DRTC

7.1.9. University of Delhi

The University of Delhi, a leading LIS institute in India, offers a balanced program with 8 core and 10 elective courses—an uncommon approach among developing countries. As shown in Figure 11, the program places strong emphasis on Information and Library Society (ILS), with 8 courses covering topics like information literacy and public library systems. It also provides moderate focus on areas like Information Products (IP) and Information Retrieval Systems (IRS), reflecting practical and technological engagement. However, key areas such as Library Management (LMA), Emerging Trends (ETD), and Library Legislation (LLN) are not represented, suggesting room for enhancement to meet global standards.

Figure 11: Course Cluster Distribution: University of Delhi

7.1.10. Pondicherry University

Pondicherry University, a relatively new entrant in LIS education, has quickly emerged as a dynamic institution. Its curriculum is divided into Hard Core and Soft Core courses, emphasizing structure in core and elective offerings. The university places strong focus on Information and Communication Technology (ICT) with 7 courses, followed by Information & Library Society (ILS) with 6, and both Knowledge Organization & Management (KOM) and Research Methods & Statistics (RMS) with 4 each. However, areas like Information Sources (INS), Library Management (LMA), and E-Documents & Theses (ETD) are not represented, highlighting opportunities for further curriculum development.

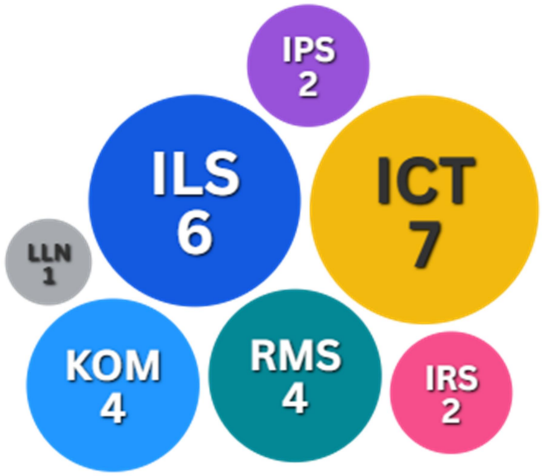

Figure 12: Course Cluster Distribution: Pondicherry University

An analysis and visualization of the course cluster distributions in specific universities are provided in the next section.

8. *Subject wise Distribution of select Universities*

8.1. Information & Library Science (ILS)

Figure 13 highlights global disparities in emphasis on the Information & Library Society (ILS) domain within LIS curricula. Top institutions like the University of Illinois (23 courses) and the University of Texas (15) show strong commitment to ILS, while the University of North Carolina (10) reflects moderate focus. In contrast, Indian institutions like the University of Madras, Mumbai, and DRTC offer only 2 ILS courses each, indicating limited engagement. The University of Delhi stands out within India with 8 courses. Overall, the data suggests a need for developing countries to strengthen ILS offerings to align with global standards and meet evolving information needs.

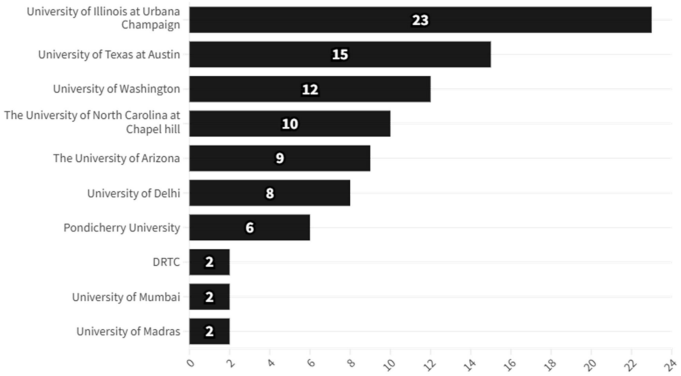

Figure 13: Information & Library Science (ILS)

8.2. Knowledge Organization and Management (KOM)

Figure 14 highlights the varied emphasis on Knowledge Organization and Management (KOM) across universities. The University of North Carolina leads with 14 courses, reflecting a strong focus on developing advanced skills in organizing information. The University of Washington follows with 11 courses, while Illinois and Texas show moderate emphasis with 6 and 5 courses, respectively. Among Indian institutions, the University of Madras and DRTC offer 3 courses each, indicating basic engagement. The University of Mumbai aligns more closely with global peers at 5 courses, whereas the University of Delhi offers only 1, showing a significant gap. The data points to a need for developing nations to strengthen KOM offerings to build essential LIS competencies.

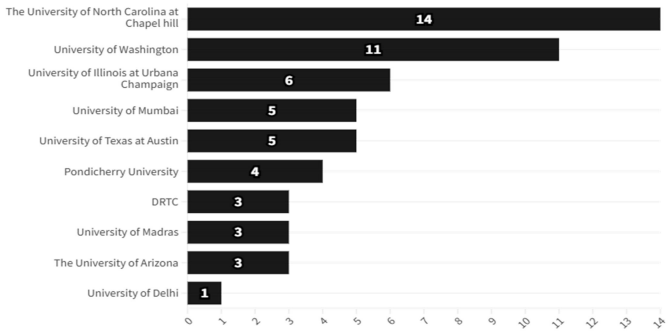

Figure 14: Knowledge Organization and Management (KOM)

8.3. Information Products & Services (IPS)

Figure 14 shows clear variation in emphasis on Information Products & Services (IPS) across universities. The University of North Carolina at Chapel Hill and the University of Illinois at Urbana–Champaign record the highest number of courses (16 each), indicating a strong focus on information service design and delivery. The University of Washington follows with 13 courses, while the University of Texas at Austin (9) and the University of Arizona (7) reflect moderate emphasis. Among Indian institutions, the University of Delhi offers 4 courses, and Pondicherry University, University of Mumbai, and University of Madras offer only 2 each. The lowest offering is at DRTC with just 1 course. Overall, the data highlights a significant gap between global leaders and Indian institutions, underscoring the need to strengthen IPS curricula to meet contemporary LIS demands.

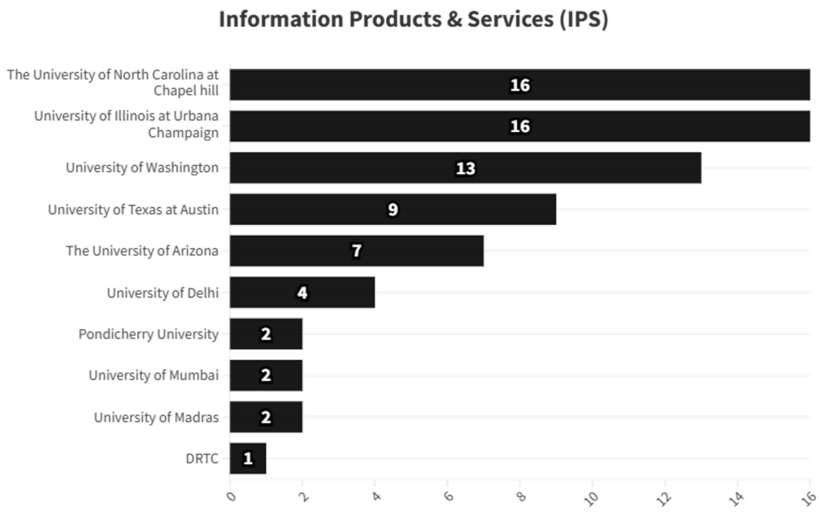

Figure 15. Information Products & Services (IPS)

8.4. Information Retrieval System (IRS)

Figure 16 compares how eight universities emphasize Information Retrieval Systems (IRS). The University of North Carolina leads with 4 courses, followed by Illinois and Washington with 3 each, reflecting strong focus on this key LIS area. In contrast, the University of Arizona, DRTC, and the University of Madras offer only 1–2 courses, showing limited engagement. The University of Texas offers none, highlighting a notable gap. Indian universities like Mumbai and Delhi also offer 2 courses each, indicating a modest but growing focus on IRS in developing regions.

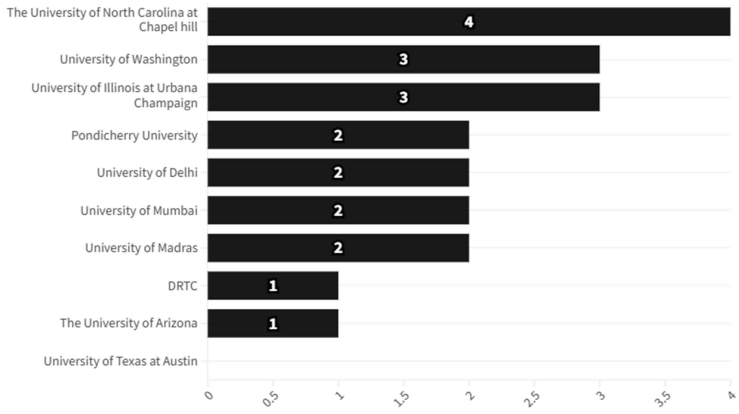

Figure 16: Information Retrieval System (IRS)

8.5. Library Management & Administration (LMA)

Figure 17 highlights the focus on Library Management & Administration (LMA) across universities. The University of North Carolina leads with 4 courses, followed by the University of Arizona with 3, reflecting a strong emphasis on preparing students for leadership roles. Texas, Madras, and Mumbai each offer 2 courses, indicating moderate focus. In contrast, Illinois and DRTC provide only 1 course, while Washington and Delhi offer none, revealing a notable gap in managerial training. This variation shows differing institutional priorities in developing administrative skills for LIS professionals.

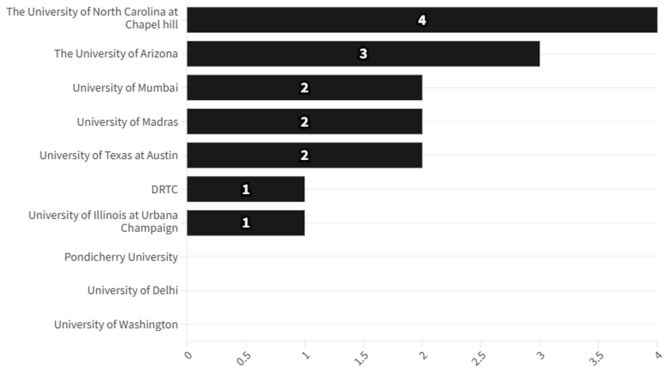

Figure 17: Library Management & Administration (LMA)

8.6. Information Communication Technology (ICT)

Figure 18 compares the emphasis on Information Communication Technology (ICT) across nine universities. The University of Illinois leads with 19 courses, reflecting a strong commitment to digital and tech-driven LIS education. North Carolina follows with 14 courses, while DRTC offers 11, showing a specialized focus. The University of Arizona includes 9 courses, and Washington offers 6. Madras and Mumbai each provide 5 courses, indicating moderate focus. In contrast, Texas and Delhi offer only 3 and 2 courses, respectively, revealing limited ICT integration. These differences highlight varying institutional priorities in preparing students for technology-oriented LIS roles.

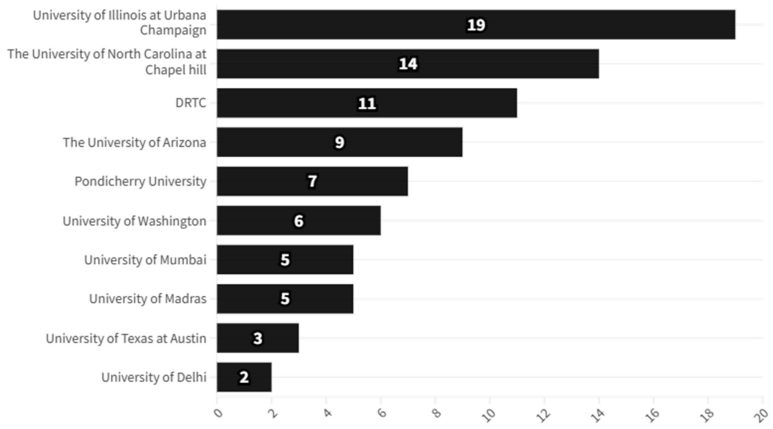

Figure 18: Information Communication Technology (ICT)

8.7. Research Methodology & Statistics (RMS)

Figure 19 highlights how universities emphasize Research Methodology & Statistics (RMS). The University of Illinois, Texas, and Washington each offer 4 courses, showing strong focus on research skills in LIS. Arizona, DRTC, and Madras provide 2 courses each, reflecting moderate attention. In contrast, North Carolina, Mumbai, and Delhi offer just 1 course, indicating limited emphasis. These differences reveal varying priorities, with some institutions valuing research training as a core component, while others give it less focus in their LIS programs.

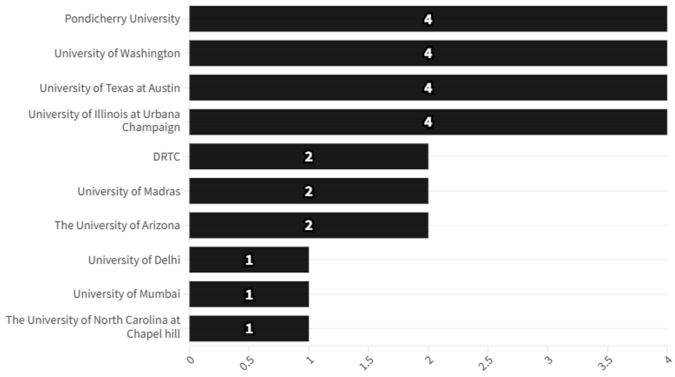

Figure 19: Research Methodology & Statistics (RMS)

8.8. Information System (INS)

Figure 20 highlights how universities prioritize Information Systems in their LIS programs. The University of North Carolina leads with 9 courses, showing strong emphasis on tech-driven solutions. Arizona follows with 6, while Illinois offers 4, indicating a balanced focus. Texas, Washington, and Madras each provide 3 courses, reflecting moderate attention. In contrast, DRTC includes only 1 course, and Mumbai and Delhi offer none, showing minimal to no focus. These differences reveal varying institutional priorities in integrating information systems into LIS education.

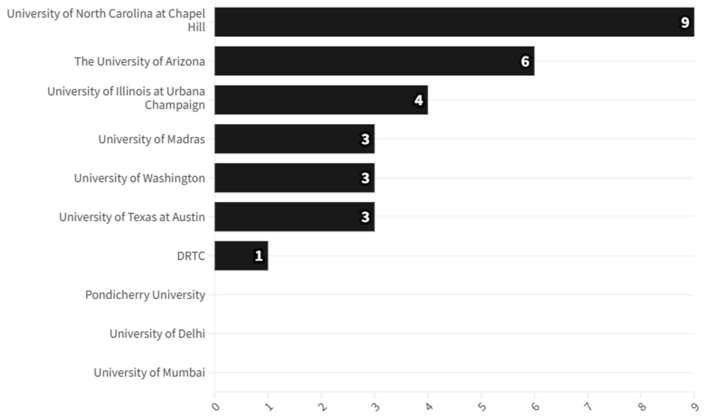

Figure 20: Information System (INS)

8.9. Emerging Trends (ETD)

Figure 21 shows how universities vary in addressing Emerging Trends (ETD) in LIS. The University of Illinois leads with 4 courses, highlighting its strong focus on future-oriented topics. Arizona and North Carolina follow with 3 courses each, showing solid engagement with evolving trends. Texas, Washington, and DRTC offer 2 courses, reflecting moderate attention. In contrast, Madras, Mumbai, and Delhi offer none, indicating minimal focus on innovation. This highlights the gap in how institutions incorporate forward-looking content into their curricula.

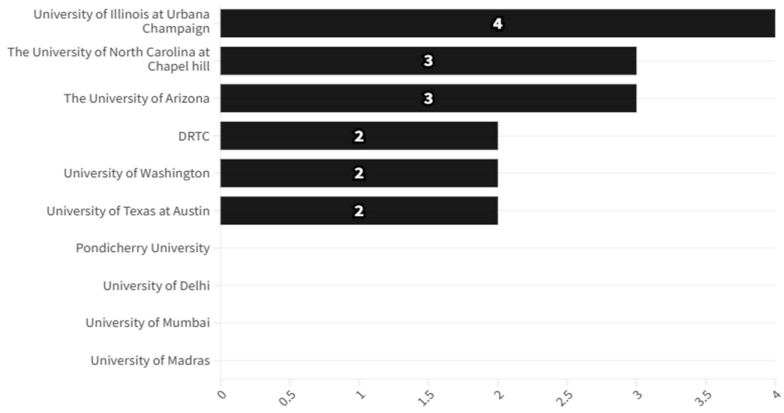

Figure 21: Emerging Trends (ETD)

8.10. Legal Legislation (LLN)

Figure 22 compares universities on their focus in Library Legislation. The University of Washington, Arizona, and Illinois each offer 4 courses, showing strong emphasis on legal aspects in LIS. Texas includes

2 courses, while North Carolina offers 1, indicating minimal coverage. In contrast, Indian institutions—Madras, Mumbai, DRTC, and Delhi—offer no courses in this area, revealing a significant gap. This highlights a broader divide, with developed nations placing greater curricular emphasis on legal frameworks in library science.

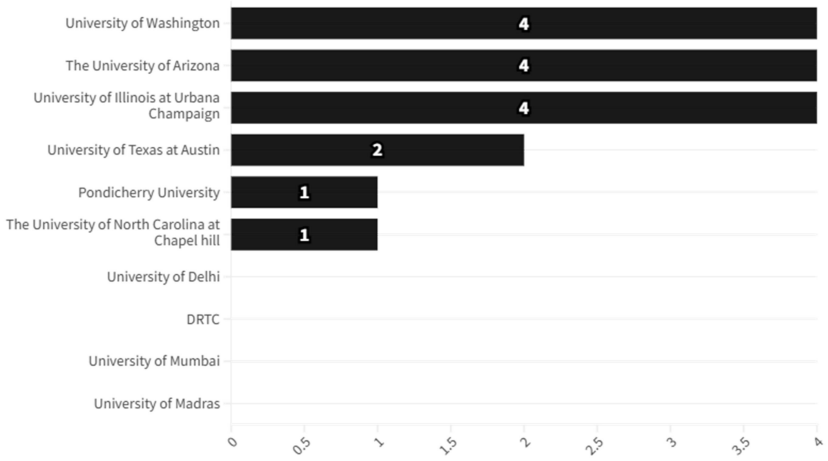

Figure 22: Legal Legislation (LLN)

9. DISCUSSION

9.1. Mapping LIS Education

9.1.1. United States of America

Figure 23 presents a detailed overview of the distribution of Library and Information Science (LIS) courses across various thematic clusters in the United States, highlighting both diversity and academic prioritization. The radar chart reveals that the Information & Library Society (ILS) domain leads the curriculum with 69 courses, signifying its foundational role in LIS education. This is followed closely by Information Products & Services (IPS) with 61 courses, and Information Communication Technology (ICT) with 51 courses, indicating the strong emphasis placed on service-oriented and digital competencies. A moderate number of courses are observed in Knowledge Organization and Management (KOM) with 39 courses, and Information System (INS) with 25 courses, reflecting their sustained importance in structuring and managing information. Clusters like Research Ethics & Statistics (RMS) and Library Legislation (LLN) both offer 15 courses, while Emerging Trends (ETD) follows with 14, showing strategic attention to ethical, legal, and future-oriented developments in the field. Meanwhile, Information Retrieval Systems (IRS) with 11 courses and Library Management & Administration (LMA) with 10 courses appear less prioritized, though they remain relevant components of the overall curriculum. This distribution illustrates a balanced yet forward-looking approach in LIS education in the U.S.A., with a clear towards domain that support innovation, information services and digital transformations.

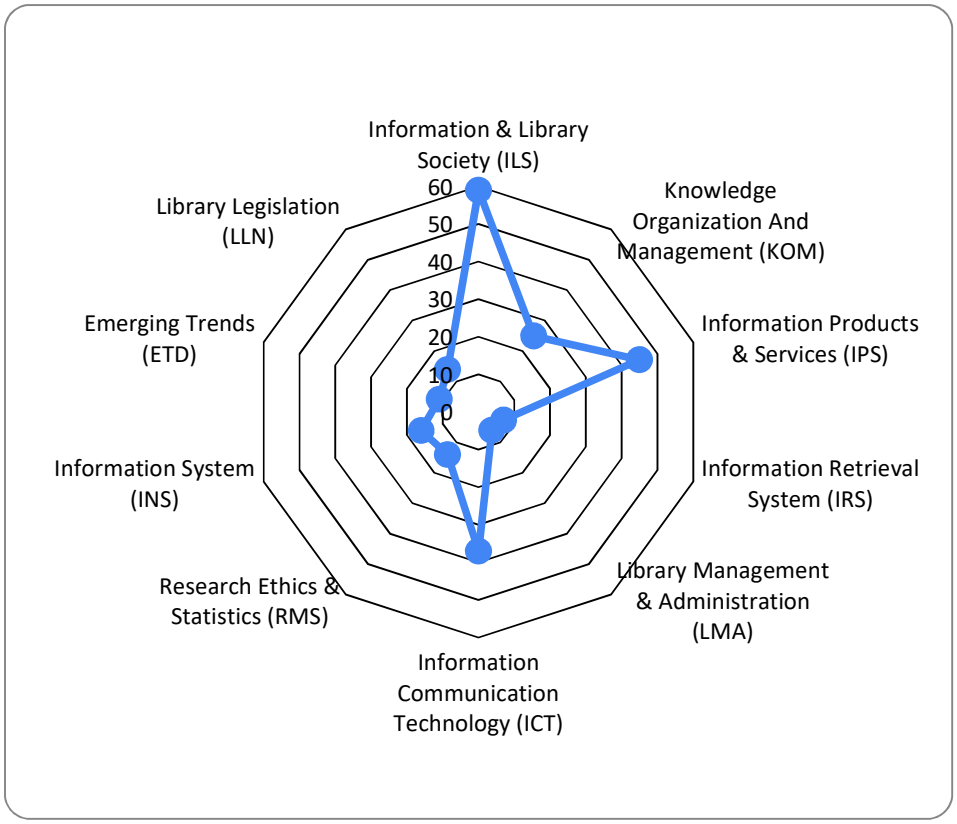

Figure 23: Subject distribution in United States of America

9.1.2. India

The distribution of Library and Information Science (LIS) courses across Indian universities reflects a curriculum that aligns with the country's evolving digital and organizational priorities. Leading the curriculum is Information Communication Technology (ICT) with 30 courses, highlighting India's strong focus on embedding technological proficiency within LIS education to meet global and national digital transformation goals. Information & Library Society (ILS) follows with 20 courses, reinforcing the foundational understanding of the profession, while Knowledge Organization and Management (KOM) stands at 16 courses, showcasing the importance placed on effective information structuring and resource management. A moderate number of courses are offered in Information Products & Services (IPS) and Information Retrieval Systems (IRS) with 11 and 9 courses respectively, indicating a steady engagement with both practical tools and access systems in LIS practice. Meanwhile, Research Ethics & Statistics (RMS) with 10 courses and Library Management & Administration (LMA) with 5 courses represent areas with consistent but lower emphasis. Notably, Information Systems (INS) is covered by just 4 courses, and Emerging Trends (ETD) receives minimal attention with only 2 courses, suggesting limited curricular space

for new developments and innovations. Library Legislation (LLN) is critically underrepresented with only 1 course, signaling a need for greater focus on legal and policy-related competencies in LIS training.

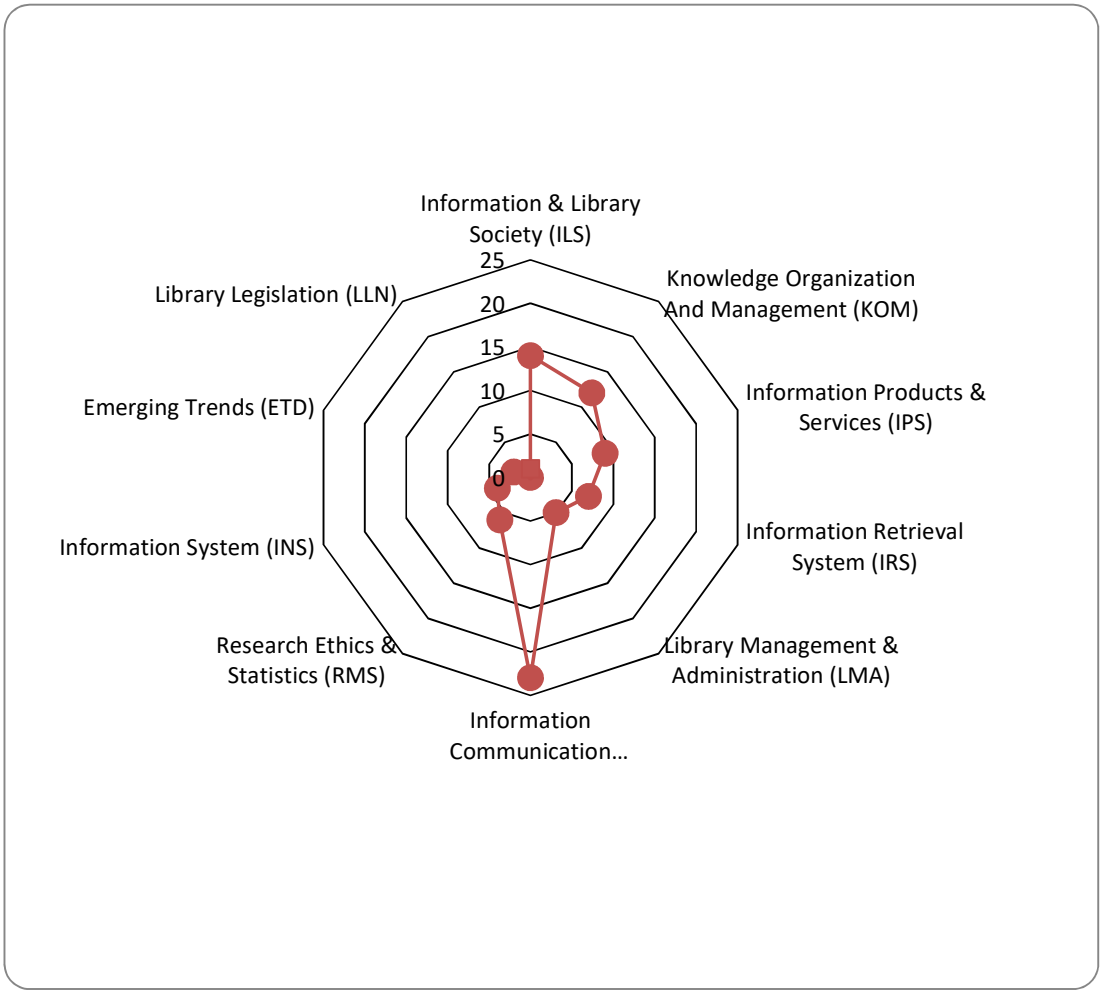

Figure 24: Subject distribution in India

10. CONCLUSION & RECOMMENDATIONS

The comparative study of Library and Information Science (LIS) curricula in the USA and India highlights clear contrasts in teaching approaches and curriculum design. American universities adopt student-centered models with extensive elective options, fostering specialization, interdisciplinary learning, and alignment with global industry needs. In contrast, Indian LIS programs remain largely core-focused, offering limited flexibility for students to adapt to emerging fields. A key reason for this gap lies in faculty strength and accreditation practices. U.S.universities, supported by larger teaching staff and American Library

Association (ALA) accreditation, maintain diverse, dynamic programs. Indian institutions, often with fewer faculty and only UGC approval, lack direct involvement from professional bodies, limiting innovation and industry relevance.

To address these challenges, the University Grants Commission (UGC) should establish a national, skill-based LIS curriculum framework to ensure quality, consistency, and employability. Regular curriculum reviews and accreditation are vital to keep pace with technological advances, evolving job roles, and issues like misinformation and digital ethics. Strengthening international collaborations can promote faculty exchange, research partnerships, and digital resource sharing, enhancing both quality and global integration.

Finally, LIS programs in India must adopt modular, elective-driven structures that promote flexibility, interdisciplinarity, and leadership readiness. A forward-looking, student-focused curriculum will better prepare LIS professionals to navigate the demands of an evolving, technology-driven information environment.

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