Summary of Competitive Landscape (Technology Focus):

- **Dominican (DU)** has a core tech course and offers electives covering digital libraries, databases, web design, systems analysis, digital curation, records management, info storage/retrieval, big data, and social media.
- **Maryland UMD** has a core tech requirement and offers a variety of electives heavily focused on archives, digital curation (multiple courses), records management, metadata, government info, health informatics, and digitization. It also lists an introductory data science course.
- **North Carolina UNC** has a core course related to tech and a mandatory "Technology" course bin with explicit requirements. It offers a broad range of courses including programming, databases, web development, data analytics, big data, information visualization, digital forensics, multiple digital curation/preservation courses, data governance, AI, and social informatics. It also lists informal specializations in many of these tech areas.
- **University of Washington UW** has a core Technology Fundamentals course or equivalent. It offers specific courses in programming, databases, XML, information retrieval, multiple data curation courses, beginning web development, metadata, digital preservation, and introduction to data science.
- **University of Michigan UofM** has Programming I as a core course and offers deep specializations with required tech courses in areas like Big Data Analytics (programming, data science, machine learning, data mining, visualization, databases, NLP), LAKES (digital curation, records management, databases, web archiving, networked services), UX (programming, web design, interaction design, usability, accessibility, AR/VR), and Agile Development (programming, web design, interactive apps, interaction design, usability, databases, mobile).

UNC and UofM appear to offer the most structured and comprehensive technology course offerings among the provided sources, with required bins or explicit specializations that guide students into specific tech-focused career paths. They also feature more foundational courses in programming and a wider range of data-related topics compared to DU and UMD (based on the listed examples). UMD and UW have notable strengths in digital curation and archives technology.

SWOT Analysis for Dominican's Technology Courses

Based on the courses offered, here is a SWOT analysis for the technology courses offered at Dominican University:

Strengths:

- **Mandatory Core Coverage:** Dominican requires a core technology course (LIS 709) ensuring all students gain some foundation in technology for the profession.
- **Diverse Elective Topics:** Offers a good variety of specific technology areas through elective/alternative core courses, covering key LIS tech domains like digital libraries (LIS 759), databases (LIS 751), web design (LIS 753, LIS 786), systems analysis (LIS 754), digital asset management (LIS 757), digital curation (LIS 889), records management (LIS 886), big data (LIS 884), social media (LIS 768), and information storage/retrieval (LIS 750).

- **Coverage of Specific High-Interest Areas:** Inclusion of "Big Data and Competitive Intelligence" (LIS 884) and "Social Media and Emerging Technologies" (LIS 768) addresses contemporary topics relevant to the field.
- **Integration Focus:** Offers a course specifically on integrating technology into programming, services, and instruction (LIS 724), which is practical for application.

Weaknesses:

- **Lack of Foundational Programming:** The provided sources do not list explicit introductory programming courses (like Python, R, etc.) tailored for information professionals. This contrasts with UofM's core programming requirement18 and offerings at UNC and UW.
- **Limited Depth in Data Analytics/Science:** While "Big Data" (LIS 884) is offered, there isn't an apparent range of courses covering broader data analytics, data science fundamentals, statistics for LIS, data visualization, machine learning, or natural language processing, which are present in the offerings of UofM and UNC.
- **Absence of Structured Tracks:** The sources don't describe specific technology tracks or specializations within the DU program. While electives provide flexibility, the absence of guided paths (like UNC's bins/specializations or UofM's specializations) might make it harder for students to build deep expertise in a specific tech area.
- **No Explicit UX/Accessibility Courses:** Courses specifically focused on User Experience (UX) design, evaluation, or accessibility for information systems are not listed. These areas are present in the UofM and UNC course lists.
- **Single Course for Digital Curation:** Only one course on Digital Curation (LIS 889) is listed, whereas UMD, UNC, and UW offer multiple courses covering different aspects like preservation, policy, access, or advanced topics.

Opportunities:

- **Meet Growing Demand:** There is a growing demand for LIS professionals with strong technical skills, particularly in programming, data science, and UX. Adding courses in these areas could make the program more attractive.
- **Develop Specializations:** Creating formal or informal technology specializations (e.g., "Digital Archives & Curation," "Information Systems & Analytics," "Web & User Technologies") could provide clearer pathways for students interested in tech-focused careers.
- **Enhance Digital Curation Offerings:** Expanding digital curation and preservation courses could capitalize on strengths in archives and records management and align better with offerings at competitor schools.
- **Address Underserved Areas:** Introducing courses in UX and accessibility would address important aspects of information system design and service delivery that are not currently explicit in the DU course list.
- **Integrate Tech Across Curriculum:** While there is a tech integration course (LIS 724), opportunities might exist to further integrate technical tools and concepts into non-tech core or elective courses.

Threats:

- **Competitive Disadvantage:** Without foundational programming and more extensive data science/analytics options, DU graduates might be at a disadvantage when competing for jobs requiring these specific technical proficiencies compared to graduates from programs with stronger offerings in these areas (e.g., UofM, UNC).
- **Attracting Tech-Focused Students:** Students specifically seeking a deep dive into LIS technology areas might choose programs perceived as having more comprehensive or specialized tech curriculum.

Possible Improvements for Dominican's Program

Based on the competitive analysis and SWOT, here are some possible improvements for Dominican University's MLIS technology course offerings, drawing upon examples from the other universities':

1. **Introduce Foundational Programming Courses:** Consider adding one or more introductory courses on programming languages relevant to LIS (like Python or R), similar to UofM's SI 506: Programming I or UW's LIS 511: Introduction to Programming for Information and Data Science. This fundamental skill is increasingly valuable for various LIS roles, including data analysis, web scraping, and automating tasks.
2. **Expand Data Analytics and Data Science Offerings:** Build upon the existing "Big Data" course (LIS 884)2 by introducing a sequence or cluster of courses in data analytics. This could include courses on Introduction to Data Analytics (like UNC's INLS 714), statistics for LIS, Data Visualization (like UNC's INLS 541 or UofM's SI 649), or even introductions to machine learning or text mining (like UofM's SI 670/671 or UNC's INLS 613).
3. **Develop Technology Specializations or Tracks:** Structure the technology electives into recommended tracks or informal specializations, similar to UNC's Informal Specializations. or UofM's detailed specializations. Examples could include "Digital Resources & Curation," "Information Systems & Technologies," or "Data & Applied Informatics." This helps students navigate course choices for specific career goals.
4. **Strengthen Digital Curation and Preservation Curriculum:** Expand the single Digital Curation course (LIS 889) into a more comprehensive offering, potentially adding courses focused specifically on Digital Preservation (like UMD's INST784 or UNC's INLS 752), digital archives management (like UMD's INST604 or UNC's INLS 750), or digital forensics for curation (like UNC's INLS 561). This aligns with strengths seen at UMD, UNC, and UW.
5. **Add Courses in User Experience (UX) and Accessibility:** Consider introducing courses on the principles of User Experience Design (similar to UofM's SI 582 or UNC's INLS 718), Usability Evaluation (like UofM's SI 622 or UNC's INLS 719), and Accessibility (like UofM's SI 552 or UNC's Design for Accessibility (INLS 690)). These areas are crucial for designing effective and inclusive information systems and services, aligning with the focus on users in LIS.