

**NEW UNITS OF INSTRUCTION, PUBLIC SERVICE,
AND RESEARCH AT PUBLIC UNIVERSITIES**

Submitted for: Action.

Summary: This item requests approval of five degree programs at three public universities.

Action Requested: That the Illinois Board of Higher Education approve the following:

Eastern Illinois University

- Masters of Arts in Teaching (MAT), Elementary Education in the Prairie Region

Northeastern Illinois University

- Doctorate in Leadership, Equity, and Inquiry in the Chicago Region

University of Illinois Urbana-Champaign

- Bachelor of Science in Chemical Engineering + Data Science in the Prairie Region
- Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science in the Prairie Region
- Master of Science in Global Studies in the Prairie Region

STATE OF ILLINOIS
BOARD OF HIGHER EDUCATION

**NEW UNITS OF INSTRUCTION, PUBLIC SERVICE,
AND RESEARCH AT PUBLIC UNIVERSITIES**

By statute, the Illinois Board of Higher Education (IBHE) is responsible for approving new on-campus and off-campus units of instruction, organized research, and public service, and units of administration proposed by public university governing boards. The Board's approval criteria, defined in rules adopted for administering the statute, addresses university mission, academic control, faculty and staff, support services, financial resources, student demand, curriculum, statewide need, and congruence with Board policies and priorities. In addition to the approval criteria in rules, each new program was reviewed for its contributions to the goals of *A Thriving Illinois: Higher Education Pathways to Equity, Sustainability, and Growth*, which sets forth new priorities to guide Illinois higher education. Staff recommendations are based on analyses of application materials and responses to staff questions.

Executive Summary – Public Institutions

Eastern Illinois University

- Master of Arts in Teaching, Elementary Education in the Prairie Region

Eastern Illinois University (EIU or the University) requests authorization to offer a Master of Arts in Teaching, Elementary Education (MAT, Elementary Education) in the Prairie Region. The 36-credit hour online program will provide an accessible, efficient route to teacher licensure for candidates who possess a qualifying undergraduate or graduate degree. The format is conducive to place-bound and non-traditional candidates who would not be able to complete a traditional, on-campus program. The full-year residency enables candidates to select placements in their local communities. Completion of the program leads to an Illinois Professional Educator License (PEL).

The University has proposed an equity plan that involves closing gaps in enrollment, persistence and completion of degrees in the field. Embedded strategies exist within the proposed program's curricular and academic support framework to promote student success. Programs and offices across campus are designed to reduce barriers and intentionally connect students with resources and experiences necessary to thrive at EIU. These programs are designed to facilitate successful student engagement and retention through mentoring, community building, advising, supplemental instruction and academic support. Both EIU and the Department of Teaching, Learning, and Foundations, where this program will be housed, offer high-impact practices to support student retention and success including an intensive teaching residency and involvement in teaching-related student organizations.

There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment ***.

Northeastern Illinois University

- Doctor of Education in Leadership, Equity, and Inquiry in the Chicago Region

Northeastern Illinois University (NEIU or the University) is seeking authorization to offer a Doctor of Education (EdD) in Leadership, Equity, and Inquiry (LEI) in the Chicago Region. NEIU explored the possibility of creating an Educational doctoral program most recently in the 2010s and formed an advisory committee for the development of the program by spring of 2021. The committee provided insights that led to a refined and focused vision for the prospective EdD program. In 2022, NEIU contracted CiTTA Partnership, a market research firm, to investigate several elements pertaining to the EdD, including prospective demand for a new EdD program in the Chicago area, important curricular considerations, and course delivery. The results of that study, which were submitted to the University in December 2022, led to the penultimate draft of the EdD program's curriculum. The program is designed to prepare leaders capable of addressing a range of social, institutional, and organizational problems, which it will achieve by building the professional capacities of educational practitioners, advocates, and leaders whose work occurs in a range of settings including elementary, secondary, and postsecondary schools, non-profit organizations, and government agencies. The mission of the LEI program is to facilitate the preparation of engaged leaders within institutions, organizations, and communities.

There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient libraries, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment ***.

University of Illinois Urbana Champaign

- Bachelor of Science in Chemical Engineering + Data Science in the Prairie Region

The University of Illinois Urbana-Champaign (UIUC or University) requests authorization to offer a Bachelor of Science in Chemical Engineering + Data Science (BS in ChemE + DS) in the Prairie region. The program will be housed in the Chemical and Biomolecular Engineering (ChBE) department within the College of Liberal Arts and Sciences. The 132-credit hour program is designed to provide students with a solid foundation in chemistry, physics, mathematics, data structures and sources, statistical principles, computing and analytics, data management, and data science applications. The curriculum focuses on the application of data science methods in the chemical engineering field. Graduates of the program will be prepared to enter traditional careers in the chemical, energy, and oil industries, as well as increasing opportunities in data engineering, biotechnology, pharmaceuticals, electronic device fabrication, and environmental engineering. UIUC has developed campuswide initiatives to systemically close persisting equity and opportunity gaps in student outcomes and faculty hiring. There are policies in place to ensure faculty possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, and financial resources to support the program.

Approval request summary, including staff conclusion, follows in Attachment ***.

- Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data

Science in the Prairie Region

The University of Illinois Urbana Champaign (UIUC or University) requests authorization to offer a Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science in the Prairie Region. The proposed Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science is a 120 credit-hour program that combines a strong foundation in molecular and cellular biology with training in data science principles, techniques, and practices. The program includes a core of Molecular and Cellular Biology courses, some with laboratory components and some without, with additional data science coursework requirements and a research or discovery experience working with data in context. There is a high need for graduates with a degree in Molecular and Cellular Biology + Data Science not only in medicine, healthcare, and pharmaceutical industries; there is also a high need for these individuals as medical image and data analysts, predictive analytics modelers, drug research and data analysts, virtual assistance platform developers, and researchers in the areas of microbial and human genomics, epidemiology and disease transmission, environmental impacts, data management, and other technological advancements involving big datasets. In addition to medical organizations and health industry, research institutions are also seeking graduates at the interface of biology and data science to fill academic professional positions in biotechnology centers, genome centers, and bioinformatics centers.

The University has laid out an equity plan that involves closing gaps in who enrolls, persists, and completes degrees in the field. Embedded strategies exist within the proposed program's curricular and academic support framework to promote student success. Programs and offices across campus are designed to reduce barriers and intentionally connect students with resources and experiences necessary to thrive at UIUC. There are policies in place to ensure faculty members possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, staff, and financial resources in place to support the program.

Approval request summary, including staff conclusion, follows in Attachment ***.

- Master of Science in Global Studies in the Prairie Region

The University of Illinois Urbana-Champaign (UIUC or the University) is seeking authorization to offer a Master of Science (MS) in Global Studies in the Prairie region. The proposed program will be housed in the College of Liberal Arts and Sciences (LAS) within the Center of Global Studies (CGS). Beyond preparing students for careers in a variety of sectors, the 32-credit hour program will enable graduates to apply theoretical and cultural knowledge to better inform and improve decision making in global contexts. The interdisciplinary curriculum combined with domestic and international practicum opportunities will prepare graduates to meet the challenges facing global governance and civil society organizations. UIUC has developed campuswide initiatives to systemically close persisting equity and opportunity gaps in student outcomes and faculty hiring. There are policies in place to ensure faculty possess the training, credentials, and qualifications to provide instruction in the proposed program. The University has sufficient library, technology, and financial resources to support the program.

Approval request summary, including staff conclusion, follows in Attachment ***.

The staff recommends adoption of the following resolutions:

The Illinois Board of Higher Education hereby grants to Eastern Illinois University authorization to grant the Masters of Arts in Teaching (MAT), Elementary Education in the Prairie Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to Northeastern Illinois University authorization to grant the Doctorate in Leadership, Equity, and Inquiry in the Chicago Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to University of Illinois Urbana Champaign authorization to grant the Bachelor of Science in Chemical Engineering + Data Science, Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science and the Master of Science in Global Studies in the Prairie Region, subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

Eastern Illinois University

Proposed Degree Title in the Region of Authorization: Master of Arts in Teaching, Elementary Education in the Prairie Region

Projected Enrollment and Degrees

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
25	50	50

Background

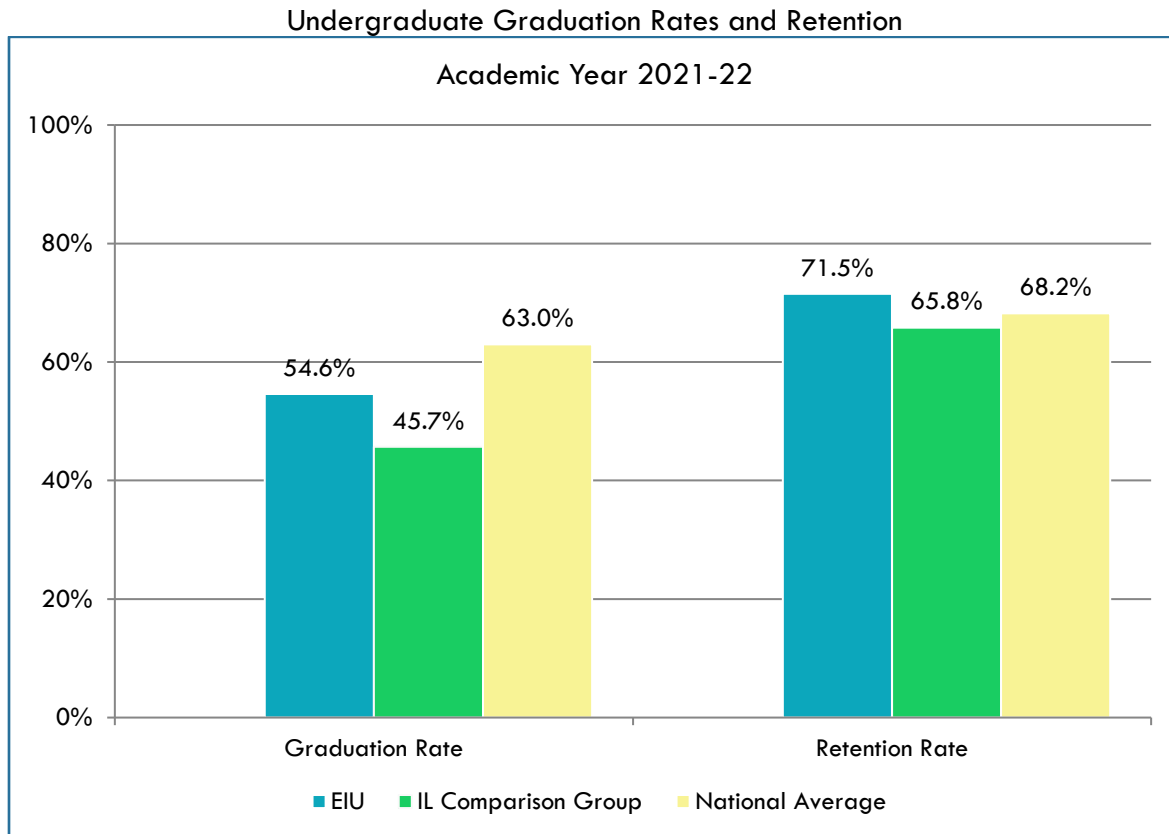
Eastern Illinois University (EIU or the University) is seeking authorization to offer a Master of Arts in Teaching, Elementary Education (MAT, Elementary Education) in the Prairie Region. In an effort to address the current teacher shortage, EIU's Department of Teaching, Learning, and Foundations seeks to offer an accelerated MAT, Elementary Education. The MAT, Elementary Education will provide an accessible, efficient route to teacher licensure for candidates who possess a qualifying undergraduate or graduate degree from a regionally accredited institution. The online modality caters to the needs of place-bound and non-traditional candidates who want to gain professional credentials without sacrificing their current work roles.

The MAT, Elementary Education curriculum will incorporate 36-semester hours of coursework from the Department of Teaching, Learning, and Foundations as well as from the Department of Special Education. Clinical experiences will be monitored and supervised by department faculty in Teaching, Learning, and Foundations as well as faculty in Student Teaching. The proposed program can be completed in three semesters instead of the traditional two-to-three-year timeline for a masters degree, allowing for a quicker path to graduation.

Institutional Data

1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

This section includes information about institutional and student success measures for Eastern Illinois University. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.



Source: National System for Education Statistics (NCES), U.S. Department of Education
 Note: Eastern Illinois University is in the four-year, inclusive Illinois comparison group.
 Higher percentages are positive indicators.

Undergraduate Graduation Rate

The graduation rate measures the rate at which entering freshmen graduate within 150 percent of normal program length. Data is provided for six-year graduation rates for first-time, full-time bachelor's degree-seeking students and three-year graduation rates for full-time associate degree-seeking students. The national standard for graduation rates is reported annually by the National Center for Education Statistics (NCES).

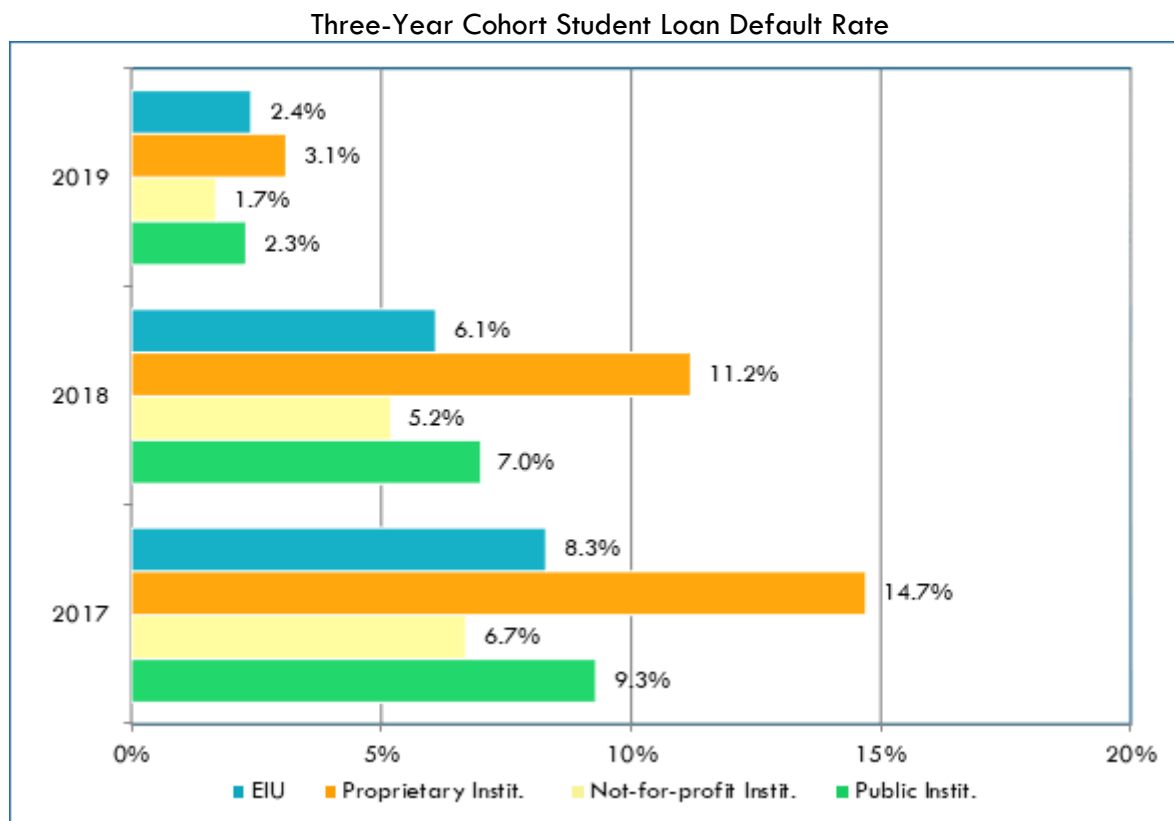
Undergraduate Retention Rate

Retention rates examine the percentage of first-time degree seeking students enrolled in the fall of the prior year that are still enrolled in the fall of the current year. The national standard for retention rates is reported annually by NCES.

Undergraduate Completions per 100 Full-Time Equivalent		
Academic Year 2021-22	Eastern Illinois University	Comparable Illinois Institutions
	23	31.9

The full-time equivalent (FTE) data is a unit of measurement intended to represent one student enrolled full time for one academic year. The calculation is based upon credit/contact hours offered at an institution divided by a standard minimum (12 credit hours) full-time course

load. The completions per 100 FTE data are included to provide a holistic view of completion across different student populations.



Source: National Center for Education Statistics (NCES), US Department of Education

Note: Due to the pause on federal student loan payment that began in March 2020, the cohort default rate for fiscal year 2020 is zero percent for the institution and all institution types. The national cohort default rate for fiscal year 2019 was 2.3 percent and zero percent for fiscal years 2020 and 2021.

A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Family Education Loan Program or William D. Ford Federal Direct Loan Program loans during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The Illinois State Board of Education (ISBE), Illinois Association of Regional Superintendents of Schools, and the Illinois Workforce and Education Research Collaborative have partnered together to collect annual educator shortage data. The collaborative effort has resulted in two educator shortage reports to inform State initiatives and institutional educator preparation curricular programming. The Unfilled Positions Report uses data collected from a survey designed to acquire information on vacant educator positions and identify the scope of the teacher shortage

throughout the State. The Educator Shortage Survey reports data on educator agency leaders' perceptions on the severity of the shortage in their respective areas and identifies causes and possible solutions to recruit and retain teachers in Illinois. Based on the 2023-2024 data (representing the 2022-2023 school year), there were 4,096 unfilled teaching positions. Additionally, 62 percent of education agencies reported a shortage in which agencies were unable to fill all positions. Unfilled teaching positions are typically filled using alternative measures such as hiring a retired teacher, modifying responsibilities of an existing teacher, or hiring a substitute with or without temporary credentials. Elementary Education teaching positions comprised most of the positions filled using alternative measures. The severity of the teacher shortage varies across the State with some of the most significant need occurring in rural areas. Respondents cite the need for additional monetary compensation and the cost of educator preparation programs.

According to the U.S. Bureau of Labor Statistics (BLS), national employment of kindergarten and elementary school teachers is projected to show little change from 2022 to 2032. May 2023 data reports the median annual wage for elementary school teachers, except special education, was \$63,680. The lowest 10 percent earned less than \$46,960 and the highest 10 percent earned more than \$104,440. Similarly, data provided by the Illinois Department of Employment Security projects slightly higher than national growth as displayed in the table below.

Illinois Employment Projections, 2020-2030			
Occupation Title	Employment 2020	Employment 2030	Employment Change (%)
Elem. School Teachers, Ex. Special Ed.	54,467	55,939	1,472 (2.7%)
All occupations	6,044,269	6,542,650	498,381 (8.3%)

Source: Illinois Department of Employment Security

A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth

The proposed MAT, Elementary Education supports Goal 1, Equity of *A Thriving Illinois* to close the equity gaps for students who have historically been left behind. Eastern Illinois University's current racial and ethnic student profile is comprised of 11.9 percent African American, 14.2 percent Hispanic, 3.6 percent Asian, 1.9 percent from two or more races, and 0.1 percent Native American. Additionally, a broad and diverse group of students are represented across all socioeconomic groups, including 46 percent Pell-eligible students and 47 percent MAP recipients. EIU continues to focus efforts on recruiting and retaining a diverse student body including those who have been traditionally underrepresented and underserved.

The diversity of Illinois' population continues to increase; however, the diversity of the teacher workforce remains stagnant. EIU plans outreach efforts to recruit students who are representative of the State's demographics. Specific areas of outreach for ethnic and racial diversity will include Champaign-Urbana, Danville, Decatur, Peoria, and the Illinois side of the Metro-East St. Louis area. Another underrepresented group is potential teachers who are first-generation college students and working adults in rural areas. Therefore, recruitment efforts will also focus on rural areas in Southern Illinois surrounding Mt. Vernon, Marion, Carbondale, and Cairo. Recruitment strategies will focus on mediums such as flyers, emails, texts, social media platforms, and personal contact.

Over the past decade, EIU has expanded its capability in monitoring student retention and

graduation data disaggregated by race and ethnicity, as well as other factors. The University has developed a set of key performance indicators including first-time full-time cohort and new transfer demographics, along with demographics by student type, socioeconomic status, and standing or progression. Data are reviewed and assessed each year by the Committee on Retention Efforts (CORE) comprised of the Academic Success Center's leaders, the Executive Director of the Office of Inclusion and Academic Engagement, and other stakeholders across campus. The University expanded its progress-monitoring capacities in 2021 by investing in Tableau software to move beyond simple indicators toward a dashboard that permits data-brushing. The first project analyzed drop, withdrawal, and fail rates of classes and sections by race, ethnicity, gender, and major to determine the barriers that exist relative to the recruitment and retention of minority pre-service K-12 educators and beyond. All members of CORE, Enrollment Management, and the Provost's Advisory Council have access to the dashboard which informs offerings and orientation registration strategies. The University also assesses the impact of high-impact practices on student success and participates in the National Survey of Student Engagement every three years to assess EIU's student performance relative to peers. Based on the data and a presidential charge to focus on student success for all learners, the Division of Academic Affairs initiated a student success task force that made a range of policy, practice, and structural recommendations that have been addressed over the past few years, including the creation of an improved early alert system and streamlined, one-stop, online student services website.

The proposed program will also address Goal 2, Sustainability, of *A Thriving Illinois*, to *build a stronger financial future for individuals and institutions by finding ways to reduce the financial burden of education on students and their families*. Eastern Illinois University's historical value proposition has been to provide Illinois residents with a high-quality education at an affordable price. For that reason, EIU continues to have the lowest cost of attendance of all four-year public institutions and has specifically developed scholarship programs that simultaneously support academic excellence and access.

Scholarships and additional student financial supports include the Golden Apple Scholarship, a scholarship providing financial assistance to students entering the teaching profession. In addition to this program, EIU's admissions team has created online resources to specifically support students of color. The Scholarship Office maintains a web resource for minority students aggregating outside scholarship resources. Likewise, EIU has developed similar online resources for undocumented students, veterans, and children of veterans. Finally, EIU plans to partner with community-based organizations to promote student success and diversity.

The EIU Financial Aid Office has a long track record of efficient and effective support of post-baccalaureate and graduate-level candidates seeking financial assistance as they work toward teacher licensure. The Financial Aid Office's streamlined procedures have proven to greatly benefit non-traditional candidates making career changes and seeking to maximize financial resources during the accelerated program experience. Specific to the MAT, Elementary Education program, EIU holds the Illinois Grow Your Own grant and is working to include funding for MAT candidates with this initiative.

The proposed degree program will contribute to Goal 3, Growth, of *A Thriving Illinois*, to *increase talent and innovation to drive economic growth*. By preparing future elementary education teachers who have significant life experience, are committed to their local communities, and are trained in an intensive, research-based program, candidates will be uniquely poised to make an immediate, positive impact on schools and their communities. Similarly, the entry of these well-prepared elementary education teachers will model the value of teaching and provide elementary

education students with a career awareness pathway. This master's level entry program will also provide candidates with increased monetary compensation. Candidates with an earned master's degree and initial licensure start higher on a school district's pay scale than a candidate with a bachelor's degree. The University has performed a study of starting salaries across the State that confirms teachers who enter the field with a master's degree earn more compensation than those entering the field with a bachelor's degree. It is also evident that there is variation in starting salaries within Illinois regions regardless of the degree earned.

Additionally, the MAT, Elementary Education will continue to spur the State's economy by leveraging new and existing partnerships for the public good. EIU regularly consults with high school principals, school district leaders, and Regional Offices of Education to design programs, receive feedback on curriculum, and develop recruitment strategies. The University plans to continue this work with the MAT, Elementary Education program. Formal program approval and continued consultation with the Illinois State Board of Education ensures the program aligns with state teacher licensure requirements and candidates are prepared to enter the teaching workforce. Existing partnerships will be enriched, and new partnerships established through the MAT, Elementary Education program. The symbiotic relationship between EIU and its K-12 partners results in a mutually beneficial partnership whereby candidates seeking licensure can complete the program and be employed as a licensed elementary education teacher in schools within their communities.

Comparable Programs in Illinois

There are currently six master's degrees or similarly titled programs at five public universities and 38 programs at 18 independent universities. Only two of these programs are offered in the Prairie region at the University of Illinois Urbana Champaign (Master of Education in Elementary Education) and National Louis University (Master of Arts in Teaching, Elementary Education). There is one comparable program offered by an out-of-state institution operating in Illinois.

EIU's MAT, Elementary Education distinguishes itself from other offerings with a 12-month, 36-credit hour, fully online program. This structure provides accessibility to a wider population of candidates. Providing a physically and financially accessible option in the East/Central area of Illinois will help address the teacher shortage, especially in rural communities where significant need exists.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the program's objectives and curriculum.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic

programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.

1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

A candidate interested in the MAT, Elementary Education must meet all the requirements for admission to graduate school. Additional requirements for the proposed degree program include: an undergraduate or graduate degree from a regionally accredited institution with a minimum 2.75 GPA; a formal letter of application summarizing the candidate's background, motivation for entering the teaching profession, and experience working in public schools (if any); 32 semester hours combined in language arts, math, science, and social studies coursework; passing a criminal history background check through the College of Education's designated vendor; and submission of a signed program acceptance letter acknowledging all program requirements.

The Graduate School and the MAT, Elementary Education program do not require a standardized graduate exam. In the 2023 article, "The Predictive Validity of the GRE Across Graduate Outcomes: A Meta-Analysis of Trends Over Time," the Educational Testing Service is cited as specifying that graduate exams like the GRE does not yield equitable scores for women, people of color, and people from low socio-economic backgrounds. Consequently, Eastern Illinois University has institutionally transitioned from requiring graduate exams for admission.

Curriculum

The MAT, Elementary Education is a 36 credit-hour program. The program will be offered fully online, with the exception of the full-year residency, which will be completed face-to-face in an elementary school. Offering the program online is particularly important for downstate, rural communities that face an acute teacher shortage. This program is aligned with national and State content area standards as directed by the Illinois State Board of Education. All educator preparation programs at EIU are approved by ISBE. The program requires courses in child development, high-quality instruction, legal issues and special education, social foundations, pedagogy, developmental and diagnostic reading, and curriculum in content areas along with two 16-week Residency in Elementary Education courses. The MAT, Elementary Education does not require a thesis or dissertation. The functional equivalent of the thesis or dissertation is the integrated unit, comprising six lesson plans, required at the end of the Residency II experience. This assignment will be the product of work researched, drafted, and revised during the final semester and will accomplish many of the same goals of a traditional capstone experience.

Compared to a post-baccalaureate program that can take up to two-to-three years to complete, the proposed program can be completed in three semesters, which reduces time to degree and cost of degree completion. In addition, curricular equity is demonstrated throughout the

course sequence by being intentionally conscious of how candidates' differences and backgrounds influence approaches to learning. Candidates are called upon to bring their social, cultural, economic, and geographical experiences to provide context for how they access and process learning. Based on the varying cultural contexts, faculty select and deliver curricular content in a manner that is relevant and promotes their academic success. Additionally, the program content is aligned with the Culturally Responsive Leading Standards initiative requiring teacher preparation programs to promote increased sensitivity and a more inclusive approach to matters of race, gender, sexual orientation, and exceptionalities in the curriculum.

Assessment of Student Learning

The College of Education utilizes a detailed rubric aligned with standards by which all candidates must be evaluated. The rubric criteria for the traditional student teaching program and the proposed program learning objectives are aligned to the criteria. Students must demonstrate specific knowledge and performance objectives aligned with the standards of the Association for Childhood Education International and the Council for the Accreditation of Education Preparation Elementary Education. The program's residency coordinator and cooperating teachers or departmental mentor will rate candidates using the University's approved evaluation rubrics during both semesters of residency, and the data will be correlated to the program's learning objectives.

Candidate performance on the final assessments in their courses will be analyzed and compared to the program learning objectives. The results from this analysis will inform course revision and improvement as needed to support and enhance student learning of key concepts. Data will be collected on key assessments during summer coursework. The data will be used to inform decisions regarding the need for candidate support services and continued progression into Residency I.

Candidates will be observed regularly to determine their practical application of course concepts in their relevant settings and feedback will be provided during and after these observations to improve performance. Each candidate's University Residency Supervisor and cooperating teacher/mentor will complete rubrics evaluating candidate performance. The data generated from these observations and end-of-semester rubrics will be used to determine if the residency expectations and experiences have been successfully met or if adjustments need to be made.

Program Assessment

Assessment data for each MAT, Elementary Education cohort will be collected during the last half of the second semester of residence. The data (grades from course assignments and courses, residency supervisor evaluations, and content tests) will be analyzed in relation to program learning objectives each summer. The analysis will be distributed to all program faculty and coordinators early in each fall semester, and at least one meeting will be conducted to discuss outcomes and make decisions about any program adjustments or the need to provide supports to program candidates. Data from the program will be incorporated into the University learning assessment processes already in place. The program data will be compared with data generated by the traditional undergraduate program to determine if the program's characteristics affect the outcomes for candidates and adjustments will be made accordingly.

Data from the required content exam will be analyzed to determine if the program meets State expectations. Sub-tests and components of the content test will be aligned to program

objectives to determine if expectations are being met or if adjustments are needed. Candidates will take the Elementary Education 305 licensure exam after admission to get a baseline of instructional focus. If the candidate passes the exam, the candidate does not have to retake the exam. If the candidate does not pass the exam, then the candidate must take the exam prior to starting Residency II. If the exam is not passed prior to Residency II, then the candidate's time to degree will be extended.

Early career data will be tracked through the ISBE's assessment process to determine the performance of candidates in their initial positions. Program staff will also seek feedback from hiring principals to determine any program improvements that may be needed to facilitate effective transition from program completion to the workplace.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high-quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

The proposed program will be fully online and no on-campus facilities will be used for the program. The existing online instructional technology infrastructure is well-suited to program delivery, as is the available technology support services and personnel. The University will provide training and support for the online course management system. Course instructors will orient students to the platform using the D2L Student Orientation modules. Within the orientation module, students will be required to complete the Rookie and Veteran tutorials during their summer coursework. These tutorials provide information on the basic features of D2L such as where to find the course syllabus and course content, how to use the discussion boards and drop box feature, and how to see course grades. The Veteran tutorials focus on advanced features of D2L such as inserting videos, taking quizzes with lockdown browser, and receiving Dropbox feedback with Turnitin Studio. The contents of the orientation modules will be reinforced through course assignments.

Students in the MAT, Elementary Education program can access all resources in EIU's Booth Library collection. The library consists of over 1,000,000 cataloged volumes, maps, music scores, and pamphlets selected to support the University's educational mission. The government documents collection includes United States and Illinois State publications. Booth Library's public catalog is part of I-Share, the Statewide network of 91 Illinois academic and research libraries. Additional electronic systems provide online access to various periodical and subject databases. Interlibrary loan services supplement Booth Library's resources by making available materials owned by other libraries. I-Share and the EIU Online Catalog may be accessed from the library's website. Booth Library also has devoted faculty and staff to provide professional help to students and faculty in their use of the library and its resources.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in

the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

The University has identified institutional policies that ensure faculty and staff possess the training, credentials, and other related qualifications to provide instruction at the institution. Faculty teaching in the proposed program will have the appropriate qualifications. A formal faculty evaluation process is in place.

Faculty delivering on-line instruction must complete Online Course Development Institute (OCDI) training in addition to the Illinois Online Network's Master Online Teacher certificate or another documented and equivalent training activity prior to teaching program courses/sections for the first time. The training consists of modules that result in the development of an on-line course. Each module is evaluated by the Director of Faculty Development and Innovation. Each faculty member who will be teaching a course in the program sequence will have completed OCDI training or its equivalent. Since faculty are only required to complete this training once, additional training is needed to ensure faculty are using best practices and making courses accessible to underrepresented groups. Therefore, additional on-line instruction opportunities will be provided through the Congressional Direct Spending grant. Approximately \$250,000 has been set aside to enhance faculty effectiveness in delivering on-line instruction.

In 2019, the University initiated a Higher Learning Commission Quality Initiative (QI) that resulted in the formulation of a campus-wide plan entitled, "Diversifying Eastern Faculty and Staff for Student Success" presented to the Board of Trustees in August 2021. The plan is in active implementation. A Senior Diversity Officer monitors the actions and goals of the plan. EIU conducted a campus climate study survey and updated critical internal governing policies by redefining the role, structure, and make-up of the search committee for faculty, administrative, and professional searches. Over the next few years, EIU will closely monitor hiring and retention across all demographic groups with the articulated goal of increasing diversity across all employee groups and creating a campus community that reflects the demography of the University's student community.

In addition to the QI, EIU's President's Council on Diversity (formed in 2016) serves as a coordinating and critical resource for campus programming, problem-solving, and innovation. The Council is supported by the faculty-led Making Excellence Inclusive (MEI) project that focuses on pedagogy and curriculum that extends from the national program led by the American Association of Colleges and Universities. MEI is a visible advocate for student success and coordinates First Generation Study Day programming, having launched and hosted an annual fall campus conference known as "Together We Rise: Reaching Inclusivity for Student Excellence." The conference's primary audience includes faculty, advisors, and professional staff at EIU. As such, MEI serves as a critical faculty resource for the entire community. The conference complements the annual student-organized EIUUnity Conference that occurs each spring in partnership with the Office of Inclusion &

Academic Engagement. In 2019, the Office of Academic Affairs also launched employee affinity groups to create new opportunities for employees to connect and interact.

The University's Office of Civil Rights and Diversity provides oversight for all non-civil service searches to ensure compliance with state and federal guidelines, as well as internal policies. The Office of Civil Rights and Diversity also provides search committee training and assistance with advertising and marketing to ensure the process is inclusive and advances institutional goals around diversifying the campus.

Eastern Illinois University's Faculty Development and Innovation Center has created a workshop on creating syllabi that enhances inclusivity. Although faculty are required to have OCDI training to deliver online instruction, online teaching certification is not currently required but is encouraged. Open interactive faculty lab sessions will be provided to faculty to acquire or hone skills in technology being used in Illinois public schools and aid candidates who need to enhance their skills. Faculty are also trained in the application of the Culturally Responsive Teaching and Leading Standards mandated by the State. Monitoring training needs will be under the purview of the Department of Teaching, Learning, and Foundations and the Council on Teacher Education. Faculty will be evaluated annually by peers and the Department Chair on the use of technology and additional training will be implemented as needed.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

The University has adequate faculty, staff, and other instructional resources to administer the proposed program. Faculty loads and other resources will be adjusted to meet the program's needs where appropriate. This will be achieved through increased efficiency in personnel and other resource usage in the current offerings of the departments and colleges.

Accreditation and Licensure

1050.30(b)(3) [applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

The program will operate in alignment with existing approved and accredited teacher educator programs at EIU. These approvals, accreditations, and recognitions have had a long-standing status with the Illinois State Board of Education. EIU has several existing educator preparation programs accredited by the Council for the Accreditation of Educator Preparation (CAEP) and the proposed program will be aligned with CAEP standards.

All educator preparation programs at EIU have been approved by the Illinois State Board of Education. The proposed program will operate in alignment with ISBE requirements along with the Illinois Professional Education Standards (IPES) and the Culturally Responsive Teaching and Leading (CRTL) Standards. ISBE requires institutions seeking new program approval to be aligned with IPES and CRTL standards.

Program Information

1050.30(b)(2) [applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Detailed information about the proposed program, including a description of the admission policies, university policies, tuition, fees, and curriculum are provided in the proposal and will be published on the University's website.

Staff Conclusion

The staff concludes that the Master of Arts in Teaching, Elementary Education proposed by Eastern Illinois University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

Northeastern Illinois University

Proposed Degree Title in the Region of Authorization: Doctorate in Leadership, Equity, and Inquiry in the Chicago Region

Projected Enrollments and Degrees

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
15	60	15

Background

Northeastern Illinois University (NEIU or the University) is seeking authorization to offer a Doctorate (EdD) in Leadership, Equity, and Inquiry (LEI) in the Chicago Region. NEIU explored the possibility of creating an Educational doctoral program most recently in the 2010s and formed an advisory committee for the development of the program by spring of 2021. The committee provided insights that led to a refined and focused vision for the prospective EdD program. Research into highly effective EdD programs, as well as an in-depth study of the findings and recommendations by the Carnegie Project on the Education doctorate were instrumental in both the conceptualization of the program and the development of preliminary drafts of its mission and curriculum. In 2022, NEIU contracted CiTTA Partnership, a market research firm, to investigate several elements pertaining to the EdD program, including prospective demand for a new EdD program in the Chicago area, important curricular considerations, and course delivery. The results of that study, which were submitted to the University in December 2022, led to the penultimate draft of the EdD program's curriculum. The program's curriculum was finalized in early 2023 and during the summer, faculty and subject matter experts worked to design the program's courses. The main objective of the proposed program is to prepare leaders capable of addressing a range of social, institutional, and organizational problems, which it will achieve by building the professional capacities of educational practitioners, advocates, and leaders whose work occurs in a range of settings including elementary, secondary, and postsecondary schools, non-profit organizations, and government agencies.

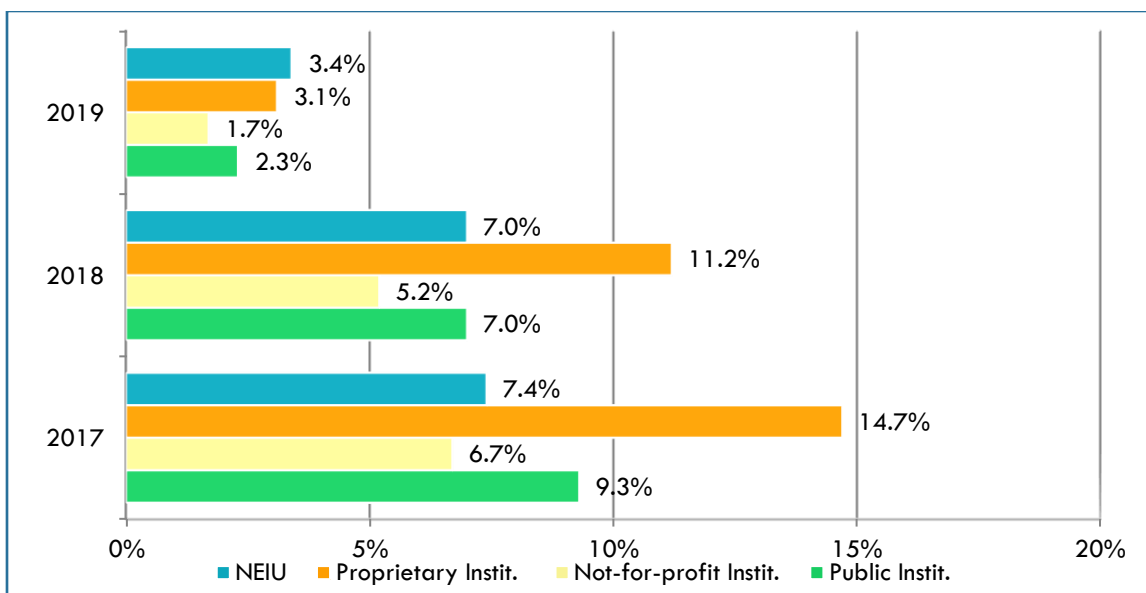
Institutional Data

1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be

consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

This section includes information about institutional and student success measures for Northeastern Illinois University. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: Due to the pause on federal student loan payment that began in March 2020, the cohort default rate for fiscal year 2020 is zero percent for the institution and all institution types. The national cohort default rate for fiscal year 2019 was 2.3 percent and zero percent for fiscal years 2020 and 2021. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Loan Programs during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and

economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

An educational doctorate program at Northeastern Illinois University provides an opportunity to impact area schools and communities, while also preparing educational practitioners for a rapidly changing workforce. The program will meet national, state, and regional needs in a variety of ways. The U.S. Bureau of Labor Statistics predicts that between 2022 and 2032, growth is likely nationwide across several careers in education and related sectors that are possible career paths for LEI graduates. For instance, there will be steady growth in the demand for elementary and secondary school administrators (1 percent) and instructional coordinators (2 percent), average growth for postsecondary school administrators (4 percent), above average growth for administrative services and facilities managers (5 percent) as well as training and development managers (6 percent), and significant growth for social and community service managers (9 percent). Thus, national demand remains strong for highly skilled educational professionals.

On the state level, the LEI program will meet the demand for educational professionals in Illinois. According to the Illinois Department of Employment Security, between 2020 and 2030, significant demand will occur in the aforementioned careers. There will be steady growth in the demand for postsecondary school administrators (3 percent) and elementary and secondary school administrators (3 percent), above average growth for instructional coordinators (6 percent), and significant demand for training and development managers (8 percent), administrative services and facilities managers (9 percent), social and community service managers (11 percent) and all other types of education administrators (15 percent).

Finally, in the Chicago region, demand for educational professionals in the aforementioned fields remains significant. According to the Illinois Department of Employment Security, between 2020 and 2030, there will be steady growth in the demand for postsecondary school administrators (3 percent) and elementary and secondary school administrators (3 percent), above average growth for instructional coordinators (6 percent), and significant demand for training and development managers (9 percent), administrative services and facilities managers (10 percent), social and community service managers (14 percent) and all other types of education administrators (17 percent). The LEI program will help meet the burgeoning needs of the Chicago area for highly skilled and engaged educational leaders. The Illinois Department of Employment Security projects that job openings in the Chicago region in each of these fields will be due to a combination of employees exiting the labor market, transferring to different occupations, along with new jobs resulting from growth between 2020 and 2030.

A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth

The proposed Doctorate in Leadership, Equity, and Inquiry at Northeastern Illinois University will support Goal 1, Equity, of *A Thriving Illinois*, to close the equity gaps for students who have been left behind. NEIU's 2023-2025 Illinois Equity in Attainment Plan focuses on improving outcomes for undergraduate students, particularly its African American, Latinx, and Pell-eligible students. The University has committed to streamlining students' transition into college by reducing the impact of non-credit, developmental courses through increasing the use of credit-bearing alternatives, improving its utilization of early-alert systems pertaining to student performance, maximizing collaboration and engagement across units, supporting faculty professional development to increase the use of culturally responsive and inclusive pedagogies, improving equity in university hiring, removing barriers to financial aid accessibility, centralizing administration of social services,

and participating in ongoing Illinois Equity in Attainment initiatives. Such developments hold some promise for its existing graduate programs, and possibly the LEI program. In seeking to bolster academic supports, improve retention, and increase graduation rates for undergraduate students, NEIU contributes to a growing population of educated, skilled, and aspiring individuals capable of succeeding in their careers and in graduate study. These students, especially those who pursue careers in the education field and earn masters' degrees, are potential students for the LEI program. For example, NEIU's Office of Institutional Research reports that between 2014 and 2023, 506 students who earned master's degrees from Goodwin College of Education programs, had also earned their undergraduate degrees from the University. Hence, while NEIU's equity initiatives focus directly on undergraduate education, they also possess notable implications for its graduate programs, especially insofar as a pipeline exists between its bachelor's and master's programs, and the degree to which this can be extended to the doctoral program in the future.

The proposed Doctorate in Leadership, Equity, and Inquiry will support Goal 2, Sustainability, of *A Thriving Illinois, to build a stronger financial future for individuals and institutions by finding ways to reduce the financial burden of education on students and their families*. NEIU's Illinois Equity in Attainment Plan 2023-2025 has prioritized affordability, stating, "The most important facets of the University's mission are to offer high quality, affordable undergraduate and graduate programs to a broad spectrum of students and to foster student growth and development." To this end, NEIU endeavors to provide affordable education, and has been lauded for its affordability. The LEI program seeks to mirror this trend to offer affordable tuition costs. The program compared tuition rates for fourteen regional doctoral-granting institutions which offer one or more EdD programs and found that once launched, NEIU's proposed program will be the fourth least expensive program in the region. The least expensive EdD programs are offered at Illinois State University, Chicago State University, and Governors State University. Further, relative to the costliest private and public EdD programs, NEIU is 52 percent more affordable than Concordia University Chicago and 37 percent more affordable than the University Illinois Chicago. Hence, NEIU will strive to deliver a high-quality program, while also fulfilling the University's aim to provide affordable education. In addition, to support affordability, the program will offer graduate tuition waivers, which will be used according to the existing Graduate College policy.

The LEI program will contribute to Goal 3, Growth, of *A Thriving Illinois, to increase talent and innovation to drive economic growth*, by meeting regional and state workforce needs. The Illinois Department of Employment Security notes that there will be growth in the demand for various kinds of education administrators statewide and within the Chicago region. This growth will create sustained demand for education leaders who work in a variety of settings including K-12 schools, postsecondary schools, and community organizations. The LEI program is poised to address this demand, in view of both labor market needs and steady demand for doctoral degrees in education. According to market research firm CiTTA Partnership, "EdD degree demand has grown in the past decade both nationally and regionally, as evident by growing graduation numbers and increasing entry by private, for-profit institutions into the market." Additionally, the program is being proposed in a context where interest in doctoral EdDs remains strong. For example, in the Chicago area, Education doctorate completions are significantly greater than in engineering, biology, and physical sciences. According to data from the Integrated Postsecondary Education Data System (IPEDS) of the National Center for Education Statistics and the United States Department of Education, for doctoral degree completions within the Chicago region, there is a stronger demand for doctoral degrees in education than other terminal degrees for the year 2022. Despite moderate decline between 2017 and 2021, according to IPEDS data, demand for doctoral degrees in education remains strong, showing marked growth over the last three years. Further, doctoral degrees in

education with a focus on education administration and supervision in a number of specialized areas continue to be in demand over the last decade. Hence, despite declines during this period, demand has generally remained steady with moderate growth in recent years.

Comparable Programs in Illinois

In Illinois, only one doctoral program (University of Illinois Chicago's Urban Education EdD) uses the same Classification of Instructional Programs (CIP) code as the proposed LEI program. While this program uses the same CIP code, due to its focus on training school leaders exclusively, its objective differs from the LEI program, which seeks to develop education leaders more broadly. However, in addition to the University of Illinois Chicago's program, there are several other doctoral programs offered by public and independent institutions that are comparable to LEI, though each of these use different CIP codes than the LEI program. Some of the closely related programs are below.

Comparable Programs			
Institution	Degree	Region	Sector
Chicago State University	Doctorate in Educational Leadership (EdD)	Chicago	Public
Concordia University	EdD/PhD in Educational Leadership EdD/PhD in School Leadership EdD/PhD in Higher Education Leadership EdD/PhD in Teacher Leadership	West Suburban	Independent, Not-for-profit
Governors State University	Doctorate in Interdisciplinary Leadership	South Metro	Public
Illinois State University	EdD and PhD in Educational Administration	Western Central South Metro Chicago	Public
Judson University	EdD in Educational Leadership and Policy Studies	Fox Valley	Independent, Not-for-profit
Lewis University	EdD in Educational Leadership for Teaching & Learning	Chicago	Independent, Not-for-profit
National Louis University	EdD in Educational Leadership	North Suburban Fox Valley West Suburban South Metro	Independent, Not-for-profit

		Chicago	
University of Illinois Chicago	EdD in Urban Education Leadership	Chicago	Public

Source: IBHE Program Inventory

Each of the listed programs are comparable to the LEI program in one or more respects: their program objectives, a focus on urban education and communities, curricular orientations, use of alternatives to the traditional qualifying exam, and a practice-oriented dissertation. While some of these programs share the LEI program's emphasis on the development of leaders, some focus more on schools as the core focus of these efforts (Concordia University Chicago, Judson University, Lewis University, National Louis University, and University of Illinois), while others emphasize the production of leaders for the education sector more broadly (Governors State University and Illinois State University), which is the focus of the LEI program. Only one program focuses on the urban milieu (University of Illinois Chicago), which is a central feature of LEI.

Given that demand for doctoral degrees in education has grown steadily over the last decade, in addition to the aforementioned trends in the labor market, the LEI program will likely benefit by the growth in educational doctoral degree completions and help to meet future needs for educational leaders. Thus, it is reasonable to anticipate that the LEI program will contribute appreciably to the broader constellation of which the aforementioned programs are a part. Further, given that NEIU is a Hispanic-Serving Institution and traditionally serves first-generation students, it is likely that the LEI program will similarly draw upon these populations. All of these factors should minimize any negative impact that NEIU's doctoral program has on the enrollments of existing doctoral programs.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The proposed program is in alignment with the overall mission of Northeastern Illinois University and is consistent with the purpose, goals, and objectives of the University. The mission of the LEI program is to facilitate the preparation of engaged leaders within institutions, organizations, and communities. The mission of the program will be achieved by building the professional capacities of educational practitioners, advocates, and leaders whose work occurs in a range of settings, including elementary, secondary, and postsecondary schools, non-profit organizations, and government agencies.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be

requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.

1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

Prospective students seeking admission to the Leadership, Equity, & Inquiry EdD program must submit an application, participate in an interview as well as a group discussion of a scholarly text, and submit a critical reflection on the scholarly text. Applicants must possess a master's degree from an accredited college or university with a GPA of 3.0 or higher. Additionally, applicants must have a minimum of three years of professional experience in the education sector (teaching, leadership, supervision, evaluation, curriculum design, policy advocacy, or community organizing). Prospective students must submit a two-page statement addressing their goals and objectives specific to the EdD program. Three recommendations must be obtained from professors and supervisors who can attest to their academic preparation and/or professional qualifications. Finally, applicants who meet the necessary criteria will be invited for individual and group interviews. The interview process will consist of three components: an individual interview, a group interview, and a reflective essay on a scholarly text.

Curriculum

The Leadership, Equity, and Inquiry program is a 60-credit hour educational doctorate program designed to prepare educational leaders in the Chicago region. Courses will be delivered in both face-to-face and hybrid formats. The proposed program curriculum—based upon leadership, the social foundations of education, and research methods, offers students several courses that support the development of their scholar-practitioner identities, supports exploration of a key problem of practice which will guide their doctoral study, guides the development of their dissertation proposal, and finally, offers a dissertation seminar where they will receive guidance and support throughout the dissertation process. The core curriculum synthesizes various elements pertaining to leadership and the social foundations of education. The doctoral seminar series orients students to doctoral study and focuses on the development of their scholar-practitioner identities. To support successful program completion, the dissertation sequence seeks to provide guidance and support throughout the dissertation process. The LEI program will prepare educators to address critical challenges within communities, schools, and other organizations. As scholar-practitioners, students will engage in deep reflection on key problems of practice, and the social and structural elements that undergird these through an interdisciplinary study of Chicago, its communities, and institutions. Further, doctoral students will examine the dynamics of leadership, organizational change and management, the policy formation process, and the role of economics and finance in urban development, among other areas. Students will learn a variety of research methods focused on their applicability to the practical challenges they face in their practice. Additionally, doctoral study will center on the development of key analytical and methodological tools that effectively serve to enhance the capacities of scholar-practitioners to improve the lives and life chances of those impacted by their work. Prospective occupations for LEI graduates include training and development managers, educational administrators, social and community service managers, and instructional coordinators.

Building on the history of Northeastern Illinois University and its tradition of community

engagement across its three campuses as well as its satellite campuses, the LEI educational doctorate program is focused on developing leaders capable of addressing a range of social, institutional, and organizational problems. The program strives to enable students to be better practitioners in the communities and institutions in which they serve. Students will develop a deep understanding of the complex interaction of social forces and systems, as well as the multidimensional ways in which these shape lives and life chances. Furthermore, given its history and culture, as well as its status as a global city, Chicago is an urban archetype whose richness appreciably augments student learning.

Assessment of Student Learning

Student learning outcomes will be assessed using direct and indirect measures of student learning outcomes. Through evaluation of annual reviews and course-level assessments, the LEI program gathers feedback on student learning outcomes. Course-level assessments consist of course-based activities, which include students' grades and course evaluations that are critical in reinforcing program learning outcomes. The portfolio assessment is a key benchmark to evaluate alignment between LEI program learning outcomes and students' professional and academic growth. This assessment seeks to examine how learning objectives are fulfilled through students' graduate coursework, as well as their professional practice. Students, in consultation with their faculty advisor, will review the five program learning outcomes of the LEI program and explore the ways in which these can be evidenced in their productivity and growth as scholars and practitioners. Hence, these provide an additional opportunity to assess student learning and provide data to think proactively about academic support and curriculum design. This data will be regularly reviewed by the program director along with key faculty personnel, who will, in turn, recommend and implement necessary revisions (at the course or program level) to enhance student outcomes on a regular and ongoing basis. Additionally, indirect measures will include data collected from students at the beginning and end of their doctoral studies, as well as from alumni after graduation. The alumni survey will enable the program to assess whether program learning outcomes are realized and sustained in the course of graduates' professional lives.

Program Assessment

The LEI program will collect data that reflects on the success of the program as a whole and the fulfillment of student learning objectives. Program improvement efforts to enhance student performance and outcomes will be constant and ongoing. Program evaluation will be based on four principal instruments including course evaluations, student and alumni surveys and interviews, portfolio assessment evaluation reports, and dissertation chair reports. Program evaluation surveys will be administered to all students at the end of their doctoral study to provide an opportunity to determine how, and in what ways, program learning outcomes were achieved in the course of doctoral study including curriculum, teaching, course delivery, and academic and financial supports. As such, this survey seeks to gauge how doctoral study has deepened students' work as scholar-practitioners, vis-à-vis the realization of LEI learning outcomes. Course evaluations will be administered each semester in order to obtain feedback on curriculum, teaching, and course delivery from LEI students. This data will be reviewed from semester to semester and inform appropriate revisions. Student and alumni surveys and interviews will be administered regularly to obtain feedback on student needs, program delivery, and overall student outcomes. The New student survey, which will be administered to all new students at the start of each academic year, will provide key insights into student needs, enabling effective adjustments to be made in relation to teaching, advising, and other academic supports. The Alumni survey will be used to assess the impact of the LEI program on graduates' career trajectories including career progression, as well as understand the broader impact of program alumni on the field. Some respondents may be

interviewed in order to gain further insight into alumni perspectives and experiences.

Portfolio assessment evaluation reports will be completed by students' faculty advisors following completion of their portfolio assessments. These reports will indicate whether students have passed or failed their assessment, include each evaluator's assessment rubric, in addition to any notes related to each student's performance. These reports will be aggregated and analyzed regularly in order to determine if program learning outcomes are being effectively met and to formulate any needed revisions.

Dissertation chair reports will be completed by students' dissertation committee chairs following defense of their dissertations. These reports will indicate whether students' dissertations have been approved, include comments from dissertation committee members, note any specific revisions required by the committee along with a timeframe for their completion, as well as any other pertinent details. These reports will be aggregated and analyzed regularly to evaluate students' preparedness for dissertation research, assess overall dissertation quality, and identify issues in LEI program design.

LEI program core faculty will meet annually to review program evaluation data and develop appropriate responses. Responses will include, but not be limited to maintenance of an existing practice, discontinuation of an existing practice, course redesign, course discontinuation, new curriculum development, modification of course delivery model, improvements in faculty coordination, faculty development, assessment redesign, creation of additional academic supports, and program policy change. These proposed changes will also be discussed with the doctoral program's advisory committee, a body of faculty and administrators who provide counsel and insight on the development of the LEI program. Programmatic changes deemed appropriate by both the core program faculty and advisory committee, having been approved by the program director, will subsequently be implemented. The program director will be responsible for the implementation of such changes. Finally, program revisions will occur on an annual basis or as needed.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high-quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

The current facilities are sufficient to implement the proposed program. The LEI program will be housed in the Department of Health Sciences, Physical Education, Educational Foundations, and Urban Community Studies in the Goodwin College of Education. Classroom space for in-person classes will be utilized on each of the University's three campuses. NEIU's Ronald Williams Library has five floors totaling over 140,000 square feet and contains approximately 450,000 physical titles, seating for more than 600 users, 43 public computer workstations and numerous study areas. Special features include services for people with disabilities, reservable study rooms, the Center for Teaching and Learning, the Language Learning Lab, the Learning Success Center, the Center for Academic Writing, and three classrooms for library instruction. The Ronald Williams Library also provides services at the Library Resource Center at El Centro, the CCICS Library, and the University

Center of Lake County library. The library offers over 200 subscription-only databases to NEIU users that may be accessed either on or off campus 24 hours a day. The Ronald Williams Library is a member of the Consortium of Academic and Research Libraries in Illinois (CARLI) and is a participating member of CARLI's service known as "I-Share." I-Share consists of 86 academic libraries in Illinois who maintain a shared catalog of over 38 million items.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

Initial program faculty will consist of current faculty and adjuncts from each of NEIU's three colleges. The LEI program has a program director who will also teach in the program. The proposed LEI budget includes one additional full-time faculty starting in year three of the program who will teach doctoral courses, advise students, and chair and serve on dissertation committees. Additionally, a program assistant will be assigned to support the program. The LEI program has affinity with several existing master's programs at NEIU including the Master of Arts in Community and Teacher Leaders, the Master of Science in Teaching and Inquiry, the Master of Arts in Educational Leadership, the Master of Arts in Urban Community Studies, in addition to its several Master of Arts in Teaching programs. These programs are potential resources for the program, both in terms of instructional faculty and elective courses. Further, some faculty from these programs will teach in the LEI program, advise students, and serve as portfolio assessment reviewers and dissertation committee members.

The University has committed to supporting faculty professional development and has increased the use of culturally responsive and inclusive pedagogies. NEIU's equity plan articulates its commitment to implement a mandatory equity-in-faculty hiring training to reduce bias in the hiring process. Given the relationship between having a diverse faculty and student success, the LEI program will benefit from this initiative in its efforts to attract and retain diverse faculty personnel in the future.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or

governmental grants and contracts.

The proposed Doctorate in Leadership, Equity, and Inquiry program is not requesting any new state funds as current operational budgets are adequate to support the program. The LEI program will be funded through the Goodwin College of Education's budget, in addition to LEI program tuition revenues.

Accreditation and Licensure

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

There is no specialized accreditation or licensure required for the proposed program.

Program Information

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Detailed information about the proposed program, including a description of the admission policies, university policies, tuition, fees, and curriculum will be published on the University's website.

Staff Conclusion

The staff concludes that the Doctorate in Leadership, Equity, and Inquiry at Northeastern Illinois University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

University of Illinois Urbana-Champaign

Proposed Degree Title in the Region of Authorization: Bachelor of Science in Chemical Engineering + Data Science in the Prairie Region

Projected Enrollments and Degrees

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
10	120	30

Background

The University of Illinois Urbana-Champaign (University or UIUC) is seeking authorization to offer a Bachelor of Science in Chemical Engineering + Data Science (BS in ChemE + DS) in the Prairie region. The program will be housed in the Chemical and Biomolecular Engineering (ChBE) department within the College of Liberal Arts and Sciences. The BS in ChemE + DS is part of a new series of undergraduate degrees at UIUC that fuses data science with other disciplines. In December 2021, the University was approved to offer four “+ Data Science” degree programs in

Accountancy, Finance, Information Science, and Astronomy in the Prairie region. The Bachelor of Science in Business + Data Science was also approved in December 2022. This proposal is in response to the University's 2018 Strategic Plan "The Next 150" which calls for "providing all Illinois students the opportunity to have a meaningful exposure to data science." In recognition of the interdisciplinary and outward-looking nature of data science, the University developed the "X + Data Science Majors" to offer students the opportunity to study data science while engaging with an application domain. The X + Data Science (X + DS) family of degrees will prepare Illinois students to lead society's digital transformation.

The University is a global leader in technology innovation and engineering. In 1952, UIUC became the first university to host a digital computer and has remained a leading institution in computer science since that time, continuing to host the National Center for Supercomputing Applications. The notable contributions of the University and its alumni include hardware, logic, and math operations that remain in use today, as well as ubiquitous parts of society's digital experience including PayPal, YouTube, and the digital library. UIUC is also home to one of the nation's first Chemical Engineering departments. Since its founding in 1901, the department has consistently been ranked among the best in the nation.

With the rise of digital technology, the BS in ChemE + DS will prepare students for the future and enhance their understanding of traditional chemical engineering concepts. Traditional chemical and biomolecular engineering (like many branches of engineering) mix first-principles science with practical, powerful, data-driven empiricisms. For example, the correlations used for heat, mass, and momentum transfer are rooted in first-principles dimensional analysis, combined with scaling relations and empirical correlations. The data-driven elements of these correlations make them practical and applicable for extremely complex situations, while their starting point (balance equations that identify dimensionless combinations of inputs) makes them transferrable across a range of materials and conditions. In these past applications of data science, data sets were small, and the governing equations were available (if not solvable) to identify all of the relevant variables. Accordingly, engineers made progress with simple statistical analysis tools. Now, large multidimensional data sets require more sophisticated techniques necessitating the use of state-of-the-art data science tools and data curation practices to meet the challenges of this new era. Thus, it is critical that chemical engineers are trained to apply methods of quantitative analysis and data fluency.

Modern data science presents a tremendous opportunity for chemical and biomolecular engineering, but the full power of data science will come from a judicious combination of data science and chemical engineering foundations. For this reason, students with a balanced education in both chemical engineering and data science will be uniquely poised to harness the data science revolution for applications in chemical engineering and chemical science. Graduates of the proposed program will enter the workforce with the technical skills to construct models; analyze, interpret and visualize data; and make data-driven decisions when faced with technology, economic, and safety/ethics considerations. These skills will give BS in ChemE + DS graduates a unique edge in the chemical engineering industry.

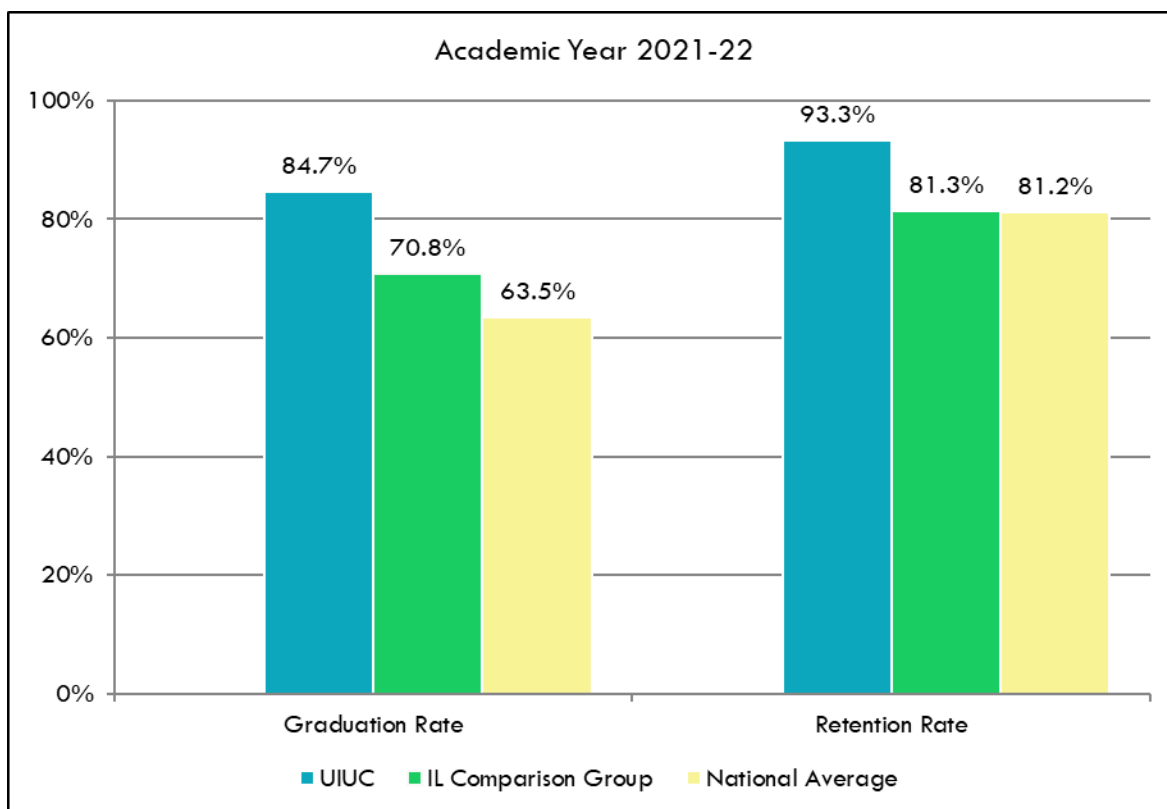
Institutional Data

1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation

rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

This section includes information about institutional and student success measures for the University of Illinois Urbana-Champaign. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

Undergraduate Graduation Rates and Retention



Source: National System for Education Statistics (NCES), US Department of Education

Note: University of Illinois Urbana-Champaign is in the four-year, selective Illinois comparison group. Higher percentages are positive indicators.

Undergraduate Graduation Rate

The graduation rate measures the rate at which entering freshmen graduate within 150 percent of normal program length. Data is provided for six-year graduation rates for first-time, full-time bachelor's degree-seeking students and three-year graduation rates for full-time associate degree-seeking students. The national standard for graduation rates is reported annually by the National Center for Education Statistics (NCES).

Undergraduate Retention Rate

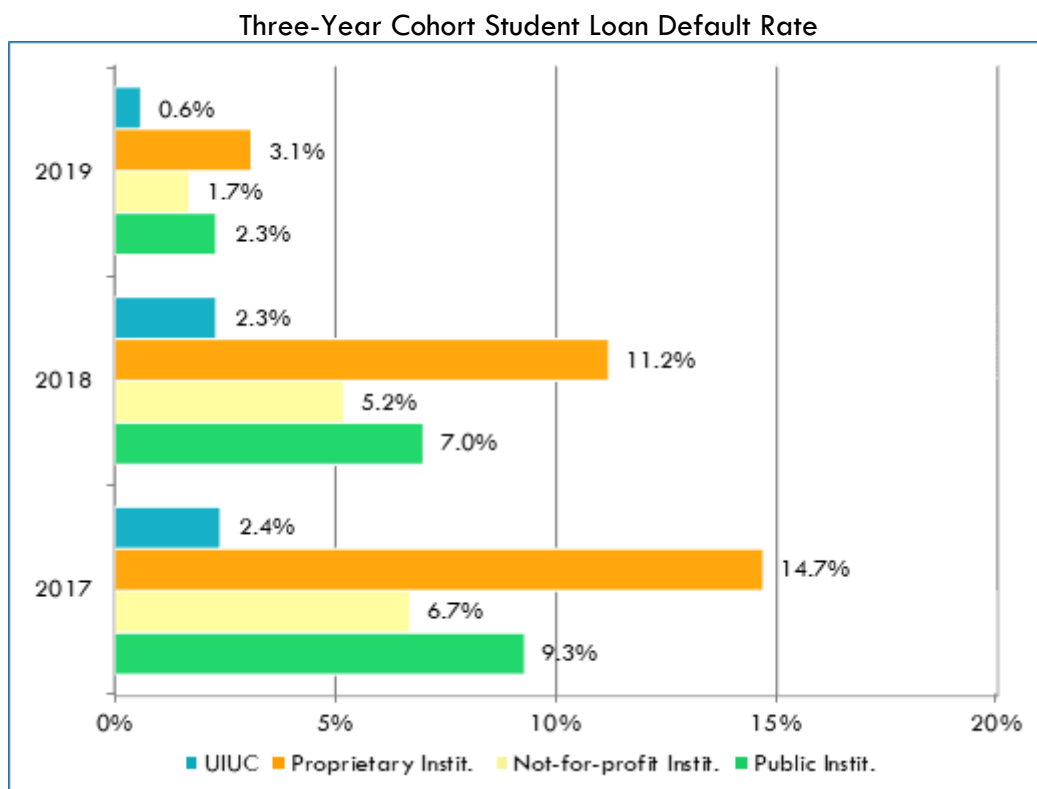
Retention rates examine the percentage of first-time degree seeking students enrolled in the fall of the prior year that are still enrolled in the fall of the current year. The national standard for retention rates is reported annually by NCES.

Undergraduate Completions per 100 FTE

Academic Year 2021-22	University of Illinois Urbana-Champaign	Comparable Illinois Institutions
	24	23.7

The full-time equivalent (FTE) data is a unit of measurement intended to represent one student enrolled full time for one academic year. The calculation is based upon credit/contact hours offered at an institution divided by a standard minimum (12 credit hours) full-time course load. The

completions per 100 FTE data are included to provide a holistic view of completion across different student populations. For the University of Illinois Urbana-Champaign, the undergraduate completion per 100 FTE is not an accurate indicator. The majority of students at the University are full-time, and substantial numbers double major and take more than 12 (up to 18) credit hours, and the standard calculation does not account for these factors.



Source: National Center for Education Statistics (NCES), US Department of Education

Note: Due to the pause on federal student loan payment that began in March 2020, the cohort default rate for fiscal year 2020 is zero percent for the institution and all institution types. The national cohort default rate for fiscal year 2019 was 2.3 percent and zero percent for fiscal years 2020 and 2021.

A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Loan Programs during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

Digital technology and the data generated by that technology are rapidly transforming society. Increasingly, businesses and consumers are looking for ways to harness the power of data to improve the lives of citizens across the globe. Businesses and government agencies rely on data science professionals to analyze large amounts of complex raw and processed information to find patterns that help drive strategic business decisions. Chemical engineers apply the principles of

chemistry, physics, and engineering to design equipment and processes for manufacturing products such as gasoline, detergents, and paper. The proposed program was developed to meet workforce demand for engineers with in-depth knowledge of data science techniques and functional expertise in designing chemical manufacturing processes. The Bachelor of Science in Chemical Engineering + Data Science is an innovative interdisciplinary program that aims to equip students with a comprehensive skill set that bridges the gap between traditional chemical engineering and modern data science practices. By integrating key principles from both disciplines, this program will produce graduates who are uniquely prepared to address the complex challenges of society's rapidly evolving technological landscape. Students in the proposed program will gain an understanding of data structures and data sources, statistical principles, computing and analytics, data management, and data science applications to solve complex engineering problems.

The job outlook for chemical engineering and data science professionals is promising. According to the U.S. Bureau of Labor Statistics, the chemical engineering field is projected to grow 10 percent from 2023 to 2033 with an average median wage of \$112,100 per year. Additionally, the chemical engineering job market is highly competitive with about 1,400 openings projected each year. Data science and related professions have even higher employment projections (an average of 20,800 openings each year) with an expected growth of 36 percent from 2023 to 2033 and a median annual wage of \$108,020. It is increasingly recognized that chemical engineers with domain expertise are critical for data science project success. Data science has transformed the chemical engineering field in the past decade and will likely be integrated into standard chemical engineering jobs.

A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth

Supportive of IBHE's *A Thriving Illinois: Goal 1, Equity*, to close equity gaps for students who have historically been left behind, UIUC was designated as a First-gen Forward institution in 2022 by the Center for First-generation Student Success, an initiative of the Student Affairs Administrators in Higher Education and the Suder Foundation. The University was one of 53 institutions named to the First-gen Forward 2022-23 cohort, the nation's first recognition program acknowledging higher education institutions for their commitment to first-generation student success. In 2023, the inaugural Director of First-Generation Student Initiatives was hired to lead programming and service delivery to the undergraduate first-generation student community. UIUC also established a first-generation steering committee to work with the University's Center for First-Generation Student Success to establish goals, identify barriers, and create improvement projects to enhance the experience of first-generation students on campus. The steering committee launched the Insights Tool, a comprehensive diagnostic self-assessment for members of the community to share information about institutional efforts to support first-generation students.

The Jeffries Center (formerly known as the Office of Minority Student Affairs) provides academic coaching, tutoring, graduate school preparation, and scholarship sourcing opportunities for all students. Additionally, programs such as the Morrill Engineering Program (MEP) and the Academic Redshirt in Science and Engineering (ARISE) program support students from underserved and underrepresented backgrounds enrolled in engineering majors at the University. These programs are designed to facilitate successful student engagement and retention. MEP engages first-year students from underrepresented backgrounds in its Mentoring Course (ENG 111) that promotes academic skill-building, professional development, and campus engagement while using peer mentors as role models for best practices. The ARISE program helps students develop academic study skills and creates opportunities for career and curricular exploration.

Moreover, to further the University's commitment to close persisting equity and opportunity gaps in faculty and staff hiring, the Distinguished Faculty Recruitment Program was developed with the goal of increasing underrepresented minority faculty. Since 2017, \$20 million has been allocated to this program for the recruitment of tenured, star, or rising faculty from a range of disciplines who exhibit exceptional scholarship and teaching. Other programs promoting diversity in faculty hiring decisions include the Targets of Opportunity Program (TOP) and the Dual Career program. The TOP program offers ongoing financial support in the form of salary funds to facilitate the recruitment of faculty who enhance campus diversity with a specific focus on underrepresented groups and women in STEM fields. For the Dual Career program, the provost provides recurring matching funds equivalent to one-third of the initial salary if the partner is hired into a tenure track position through the program. The program was recently extended to include non-recurring funds for partner hires in non-tenure track positions. The Chemical and Biomolecular Engineering department supports the University's efforts to hire diverse faculty and staff. Each hiring committee includes a specific diversity advocate. The diversity advocate ensures that all committee members are aware of best practices and complete the DiversityEdu program within three years of the search. The diversity advocate also assists with the position advertisement strategy to reach a diverse pool of qualified applicants.

The proposed program will also address *A Thriving Illinois: Goal 2, Sustainability, to build a stronger financial future for individuals and institutions by finding ways to reduce the financial burden of education on students and their families*. The University of Illinois Urbana-Champaign has demonstrated a strong commitment to enhancing college affordability particularly for historically underserved populations through various initiatives including the President's Award Program (PAP) and PAP Honors. Over \$250 million has been distributed through these programs to support students from underrepresented groups. The University also offers over \$519 million per year in financial aid to undergraduate students benefiting 72 percent of the student body. A significant portion of this funding, amounting to over \$203 million, is derived from institutional sources and primarily awarded as need-based grants and scholarships to Illinois residents. The University has two notable financial aid programs, the Illinois Promise program and the Illinois Commitment program. The Illinois Promise program, initiated in 2005, covers tuition, fees, housing, books, and supplies through a combination of federal, state, and institutional grants along with a \$2,500 federal work-study award. The funding is available to Illinois residents from families with income at or below the federal poverty level. The Illinois Commitment program, launched in 2019, provides grants to cover tuition and fees for Illinois residents with a family income of \$67,100 or less.

The Department of Chemical & Biomolecular Engineering awards scholarships annually to undergraduate students in recognition of their scholastic achievements and activities. Some of the scholarships are renewable. Each spring, scholarship recipients are recognized, along with winners of the Undergraduate Research Symposium, at an annual ceremony. The Undergraduate Research Symposium provides students in the Department of Chemical and Biomolecular Engineering with the opportunity to work alongside faculty on a variety of research projects. Students showcase their research projects and network with alumni at the symposium.

The proposed BS in ChemE + DS will contribute to *Goal 3 of A Thriving Illinois, Growth, to increase talent and innovation to drive economic growth*. The University of Illinois Urbana-Champaign has strong business and industry partnerships through statewide initiatives such as the Discovery Partners Institute (DPI) and the Illinois Innovation Network (IIN). As a key gubernatorial initiative, DPI's Tech Talent Lab and immersion programs engage with Chicago's technology workforce allowing students to interact with Chicagoland technology and innovation culture. Students make meaningful connections with regional employers and industries, university research teams, civic and

non-profit organizations, and startups that will lead to employment and talent retention in the region. IIN works to enrich the student experience through short-term boot camps around topics such as artificial intelligence, data science, entrepreneurship, and more. These intensive programs encourage students' interest in topics that are key to the 21st century economy and provide a foundation for continued study. Additionally, the University is planning to build a new data science center focused on creating knowledge through statistics, data analysis, and machine learning to accelerate job creation and economic growth.

UIUC's Research Park provides meaningful and industry-focused research and internship opportunities employing 800 undergraduate and graduate interns year-round in part-time employment. Students are paid highly competitive wages for their specialized skill sets in areas including computer science, data analytics, UX/UI design, engineering, business development, and market research. Research Park internships increase students' employment prospects by expanding their professional networks, building their professional portfolios, and developing their leadership skills. Many of the corporate sites focus on DEI outreach and participate as sponsors for various student groups and campus units. Building on the well-established relationships of the affinity and community groups on campus, the Research Park has ongoing partnerships with the career center, cultural centers, and student organizations across campus. Another program at the University, We CU, supports long-term partnerships among local organizations, instructors, and students. These mutually beneficial partnerships create impactful learning experiences for students and promote positive change in the University community. Since 2020, 3,152 students from 12 colleges have dedicated 56,115 hours to 798 service projects. In 2024, 84 students were recognized as We CU Community Engaged Scholars and completed an additional 8,615 service hours.

Additionally, students in the proposed program will have access to the Grainger College of Engineering Career Services (ECS). ECS bridges college and community relations by delivering relevant career exploration, development, and recruitment services to all students in the College. ECS builds and maintains industry relationships through strategic engagement and intentional outreach and collaboration.

Comparable Programs in Illinois

The University of Illinois Urbana-Champaign would be the first institution in Illinois to offer the Bachelor of Science in Chemical Engineering + Data Science since there are currently no comparable undergraduate programs in the state. The BS in ChemE + DS is innovative and distinctive in featuring a mixture of chemical engineering foundations with proficiency in data science tools. Students with this unique training will lead the industry in all aspects of chemical process automation and analysis. The curriculum will incorporate the application of data science methods to solve problems in the chemical engineering field including the development of predictive models, optimization of processes, and the design of experiments. Students will also explore data visualization, machine learning, and artificial intelligence techniques. Graduates will be well positioned to apply methods of quantitative analysis and data fluency in various areas such as fuels and energy, biotechnology, pharmaceuticals, foods and beverages, cosmetics and other consumer products, and advanced materials and plastics.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the program's objectives and curriculum.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.

1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

Applicants interested in the Bachelor of Science in Chemical Engineering + Data Science program must meet the general admission requirements of the University and the Department of Chemical and Biomolecular Engineering. International students are required to take the TOEFL, IELTS, or Duolingo English Test. Calculus is preferred for first year admitted students (if offered in their high school). Students must also demonstrate understanding of and interest in chemical engineering.

Inter-college transfer students must have a GPA of 3.1 or greater for at least two semesters. Students must also have a grade of C or better in two of the following ChBE courses: ChBE 221, 321, or 421. The department will review other ChBE courses the student has taken to determine the ability to succeed in chemical engineering. Students must develop a graduation plan to be approved by the head advisor or a faculty/staff member designated by the department head. For transfer students from another university, a grade point average of 3.2 or higher is required. Preference is given to students who can complete the degree requirement within a total of ten semesters (not counting summer sessions). If transferring with more than 80 credit hours of coursework, an additional review is required.

Curriculum

Engineering is a discipline broadly disseminated across campus units and departments with multiple campuswide faculty collaborations. The new Bachelor of Science in Chemical Engineering + Data Science is a 132-credit hour program that combines a strong foundation in chemical engineering with training in data science principles, techniques, and practices. The program includes a traditional core sequence in chemical engineering curriculum with additional data science coursework requirements and a data science practicum. Major-specific coursework is comprised of three components:

1. Data science core coursework (44 hours)
2. Coursework in the chemical engineering specialization area (65 hours)
3. An experiential-based learning course in which students engage in data projects in industry, research, or business settings through an internship, research project, or other off-campus experience (3 hours). Students will gather and analyze data and create comprehensive reports linking their project with data analysis and engineering. Assessments will cover experimental planning, data acquisition, analysis, interpretation, written communication, and presentation.

In addition to the 112 credit hours above, all students must complete the University's general education requirements, and any electives needed to reach the 132-credit hour degree requirement. The proposed program aligns with the requirements of the Accreditation Board of Engineering and Technology (ABET).

The School of Chemical Sciences (SCS) offers wraparound services to chemical engineering students and will support students in the proposed program. The SCS Career Services Office provides job search coaching, mock interviews, professional development workshops, and assistance with resumes, CVs, and cover letters. ChemE + DS students will also have access to the Grainger College of Engineering Career Services department and receive information about job opportunities and employer events through Handshake@illinois. The College hosts professional development presentations and resume review sessions sponsored by Engineering Ambassadors and offers mentoring through an extensive alumni network via the Grainger Engineering Link. A team of SCS advisors with specific chemical engineering expertise will provide academic advising services to ChemE + DS students including course selection, navigating University and department policies, degree planning, and monitoring academic progress. In addition, SCS advisors will help students with setting personal goals, career positioning, and academic support resources.

Assessment of Student Learning

Course and student outcomes are directly and quantitatively measured in undergraduate core chemical engineering courses each semester. Adjustments and changes to lectures, problem sets, course projects and course emphasis are based on student performance on specific outcomes. Course outcomes are developed by faculty teaching the course with input from department faculty and described within the course syllabi. Each of the course outcomes are matched with relevant student outcomes. The Chemical and Biomolecular Engineering department's approach for evaluating student achievement of outcomes involves instructors completing spreadsheets each semester for core courses. In their entirety, the documentation contained within the outcomes assessment spreadsheets directly and quantitatively demonstrate the achievement of student outcomes and tracks course improvement. Extensive quantitative assessment of student outcomes is reviewed every six years. Additional qualitative assessment is performed based on instructor observation, which prompts course improvements. Individual course spreadsheets, course improvement suggestions, samples of graded student work, and annual curriculum meeting minutes are collected and archived by the assessment committee every semester.

Senior students are surveyed starting one to two months before graduation to collect feedback on outcomes achievement and overall perception of the program including students' perceived level of preparedness, achievement, and confidence at the time of graduation. This survey is conducted twice a year to allow every student an opportunity to provide feedback. For all surveys, any qualitative suggestions are documented and grouped based on the topic. The quantitative and qualitative results of the graduating senior survey are compiled, documented, and

presented to faculty once a year. Faculty discussion and resulting action items are documented in the faculty curriculum meeting minutes.

Program Assessment

The Chemical and Biomolecular Engineering faculty members hold an annual curriculum assessment and review meeting. Within this meeting, a representative from each core ChBE course reports assessment information, overall perceptions of student strengths, and areas in need of improvement. If the results of the annual curriculum assessment and review meeting suggest the need for significant changes in course structure or coverage, the concerns are referred to the undergraduate curriculum committee for consideration.

Learning objectives and student achievement will be thoroughly assessed as part of the standard engineering accreditation process. Specifically, the proposed program will be evaluated for ABET accreditation on three or six-year intervals, like other engineering degrees on campus and reviewed based on ABET's standards.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high-quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

Existing facilities are adequate to support the proposed program. The data science core will be delivered by the School of Information Science and the Computer Science, Mathematics, and Statistics departments. The School of Information Science and the Department of Computer Science are housed in buildings that provide classroom and lab spaces for students to engage with data science. The University has recently completed construction of the Campus Instructional Facility and the Siebel Center for Design which are equipped with newer technologies to support innovative and interactive learning. The University is also renovating the buildings that house Mathematics and Statistics to provide increased classroom and lab spaces for instruction and student research. The chemical engineering courses will be offered in classrooms assigned by the Office of the Registrar Catalog Management and Section Scheduling and are mainly located in Noyes lab and Roger Adams lab. Sufficient classroom space is available in the Campus Instructional Facility.

Current library collections, resources, and services are sufficient to support the proposed program. There is no financial impact on the University Library for the creation and sustainability of the BS in ChemE + DS program. The University possesses appropriate library resources with access to online databases, books, journal holdings, and other electronic resources to support teaching and scholarly work.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in

the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

Existing faculty will provide instruction for the proposed program. The University has identified institutional policies that ensure faculty and staff possess the training, credentials, and other related qualifications to provide instruction in the BS in ChemE + DS program. A formal faculty evaluation process is in place. Tenure-track faculty at the University are evaluated annually based on activity reports created in accordance with the Office of the Provost, Communication #9: Promotion and Tenure. The reports include comprehensive sections on research, teaching, and service, as well as an optional report on activities related to diversity, equity, and inclusion. The same report is the basis for tenure and promotion; at that stage, it is accompanied by letters from external reviewers and an assessment for each section along with an overall assessment from the unit executive officer. Non-tenure track faculty are also evaluated annually in accordance with the Office of the Provost, Communication #25: Guidelines for Specialized Faculty Holding Non-Tenure System Positions.

Through a partnership with the University System Office and departments, the provost supports the Underrepresented Faculty Recruitment Program in making available non-recurring funds for research to enhance offers of employment. Additional retention efforts include programming and development activities for executive officers and faculty members across ranks. Programming and resources for unit executive officers equip them with the knowledge and skills necessary for leadership including ways to enhance their ability to support and mentor faculty within their units, particularly faculty members of color. The Office of the Provost also coordinates several leadership development programs to increase the pool of potential academic leaders on campus with an intentional focus on supporting faculty members from marginalized and underrepresented groups to explore campus leadership and administrative roles.

The SCS advising team will provide academic advising services to ChemE + DS students under the current advising model. Services will include course selection, navigating University and department policies, degree planning, and monitoring academic progress. In addition, SCS advisors will help students with setting personal goals, career positioning, and academic support resources. No additional staff resources are needed.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

The proposed program is not requesting new state funds. The University has adequate faculty, staff, and other instructional resources to administer the proposed program. The program will be supported by existing faculty and staff. There will be no impact on teaching loads. The proposed BS in ChemE + DS will share administrative resources with the existing chemical engineering program at the University.

Accreditation and Licensure

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

The Chemical and Biomolecular Engineering department will seek ABET accreditation for the proposed program. Graduates will possess high quality credentials to enter the workforce and pursue the Fundamentals of Engineering licensure examination.

Program Information

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Detailed information about the proposed program including a description of the admission policies, university policies, tuition, fees, and curriculum will be published on the University's website.

Staff Conclusion

The staff concludes that the Bachelor of Science in Chemical Engineering + Data Science proposed by the University of Illinois Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

Proposed Degree Title in the Region of Authorization: Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science in the Prairie Region

Projected Enrollments and Degrees

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
30	120	30

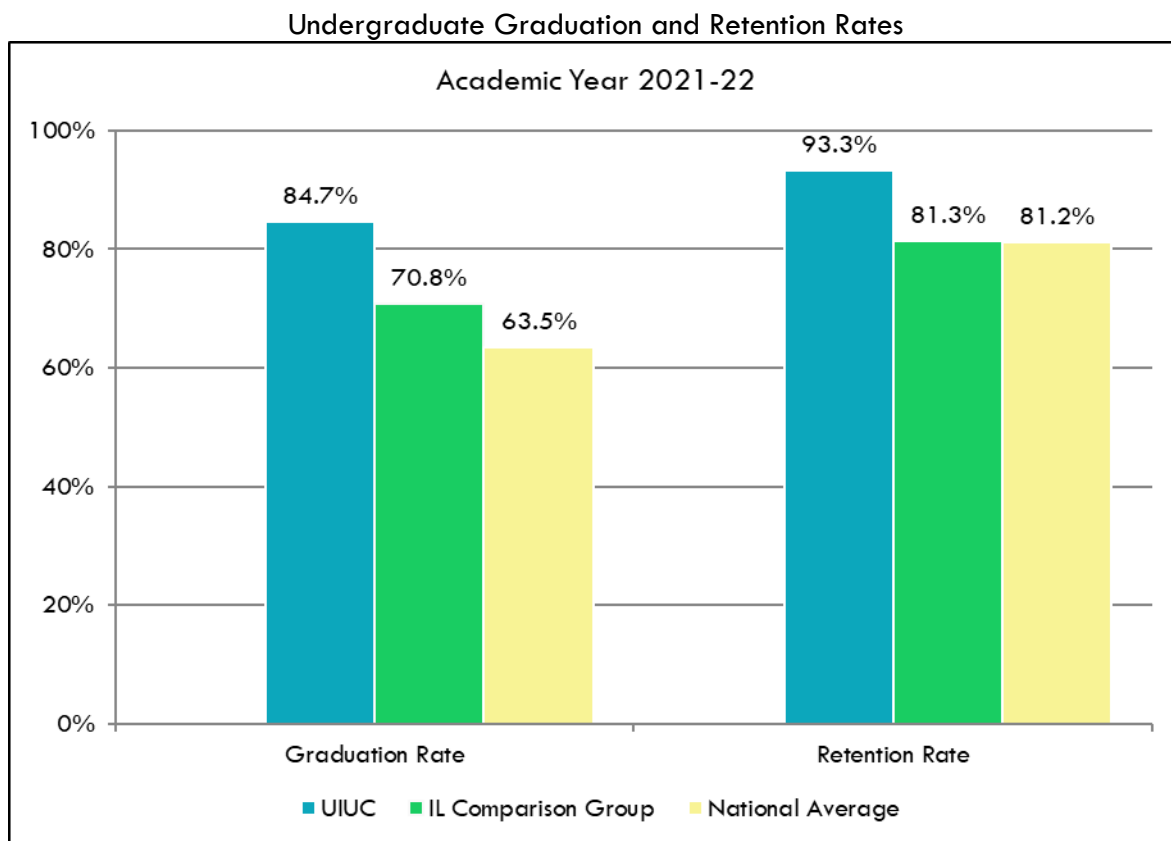
Background

The University of Illinois Urbana-Champaign (University or UIUC) is seeking authorization to offer a Bachelor of Science in Liberal Arts and Sciences (BSLAS) in Molecular and Cellular Biology + Data Science (MCB + DS) in the Prairie region. In December 2021, the University was approved to offer four “+ Data Science” degree programs in Accountancy, Finance, Information Science, and Astronomy in the Prairie region. The Bachelor of Science in Business + Data Science was also approved in December 2022. This proposal is in response to the University’s 2018 Strategic Plan “The Next 150” which calls for “providing all Illinois students the opportunity to have a meaningful exposure to data science.” In recognition of the interdisciplinary and outward-looking nature of data science, the University developed the “X + Data Science Majors” to offer students the opportunity to study data science while engaging with an application domain. The X + Data Science (X + DS) family of degrees will prepare Illinois students to lead society’s digital transformation. The proposed Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science combines a strong foundation in molecular and cellular biology with training in data science principles, techniques, and practices. The program includes a core of Molecular and Cellular Biology courses, some with laboratory components and some without, with additional data science coursework requirements and a research or discovery experience working with data in context. The data science components of the program, like the other five approved X + Data Science majors at the University, are a collaboration of four departments in three colleges, including the Siebel School of Computing and Data Science in the Grainger College of Engineering, the departments of Mathematics and Statistics in the College of Liberal Arts and Sciences and the School of Information Sciences (iSchool). By drawing strategically from the resources of these units, the data science curriculum is a set of eight courses that can be used for a wide variety of undergraduate programs in data science while avoiding duplication. The Molecular and Cellular Biology components have their foundation in the long-existing BSLAS in Molecular and Cellular Biology, which is also a collaboration of multiple departments within the College of Liberal Arts and Sciences.

Institutional Data

1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

This section includes information about institutional and student success measures for the University of Illinois Urbana-Champaign. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.



Source: National System for Education Statistics (NCES), US Department of Education

Note: University of Illinois Urbana-Champaign is in the four-year, selective Illinois comparison group. Higher percentages are positive indicators.

Undergraduate Graduation Rate

The graduation rate measures the rate at which entering freshmen graduate within 150 percent of normal program length. Data is provided for six-year graduation rates for first-time,

full-time bachelor's degree-seeking students and three-year graduation rates for full-time associate degree-seeking students. The national standard for graduation rates is reported annually by the National Center for Education Statistics (NCES).

Undergraduate Retention Rate

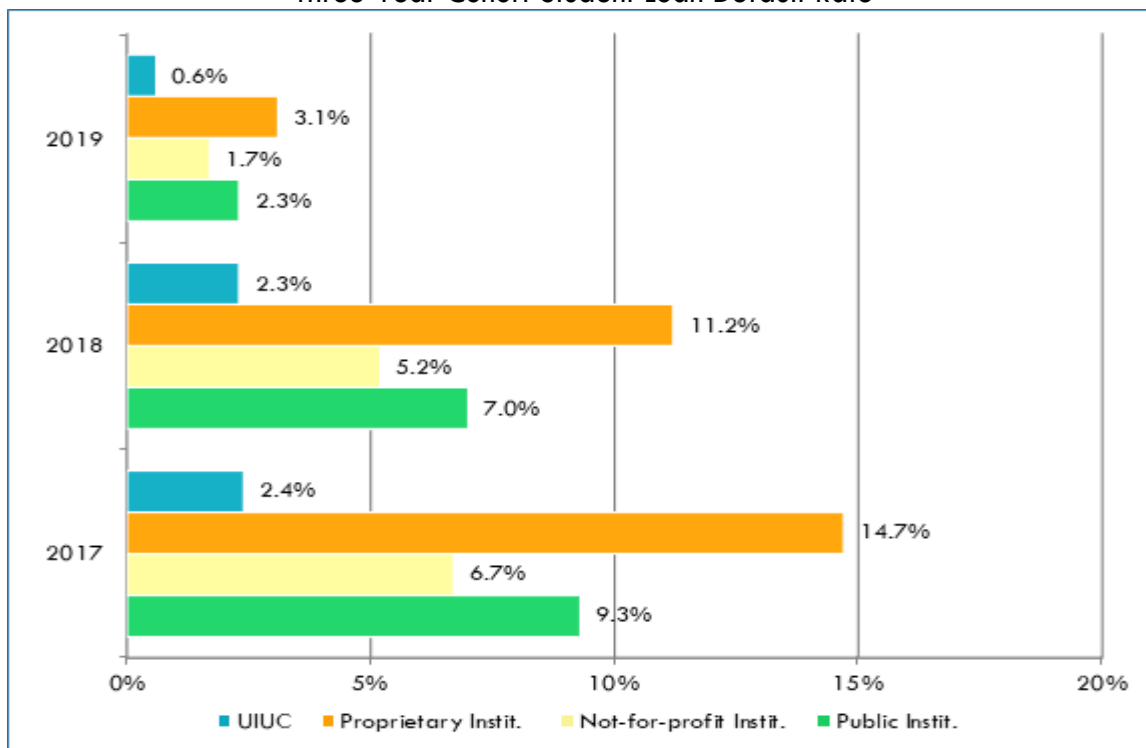
Retention rates examine the percentage of first-time degree seeking students enrolled in the fall of the prior year that are still enrolled in the fall of the current year. The national standard for retention rates is reported annually by NCES.

Undergraduate Completions per 100 FTE

Academic Year 2021-22	University of Illinois Urbana-Champaign	Comparable Illinois Institutions
	24	23.7

The full-time equivalent (FTE) data is a unit of measurement intended to represent one student enrolled full-time for one academic year. The calculation is based upon credit/contact hours offered at an institution divided by a standard minimum (12 credit hour) full-time course load. The completions per 100 FTE data are included to provide a holistic view of completion across different student populations. For the University of Illinois Urbana-Champaign, the undergraduate completion per 100 FTE is not an accurate indicator. The majority of students at the University are full-time, and substantial numbers double major and take more than 12 (up to 18) credit hours, and the standard calculation does not account for these factors.

Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: Due to the pause on federal student loan payment that began in March 2020, the cohort default rate for fiscal year 2020 is zero percent for the institution and all institution types. The national cohort default rate for fiscal year 2019 was 2.3 percent and zero percent for fiscal years 2020 and 2021.

A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Loan Programs during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

The rapid emergence of massive data sets has created demand for people trained in data science across most of the economy, including sectors that are of great importance in Illinois, such as agribusiness, computing, education, engineering, finance, government, insurance, marketing, medicine, supply chain management, and many more. There is a high need for graduates with a degree in Molecular and Cellular Biology + Data Science in the medical, healthcare, and pharmaceutical industries to work in occupations such as medical image and data analysts, predictive analytics modelers, drug research and data analysts, virtual assistance platform developers, and researchers in the areas of microbial and human genomics, epidemiology and disease transmission, environmental impacts, data management, and other technological advancements involving big datasets. In addition to medical and healthcare organizations, research institutions are seeking graduates at the interface of biology and data science to fill academic professional positions in biotechnology centers, genome centers, and bioinformatics centers. The proposed program will provide graduates with the necessary background to secure these types of positions. The U.S. Bureau of Labor Statistics (BLS) in the "Job Outlook, 2023-33" projects 36 percent growth in employment of data scientists, which is much faster than the average for all occupations. About 20,800 openings for data scientists are projected each year on average over the next decade from 2023 to 2033. The median annual wage for data scientists was \$108,020 in May 2023. BLS projects "Data Scientists" as one of the occupations with the top twenty highest projected percent change of employment between 2023 to 2033.

A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth

The proposed Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science supports Goal 1, Equity, of *A Thriving Illinois*, to *close the equity gaps for students who have historically been left behind*. The University of Illinois Urbana-Champaign has a significant number of institutional and college-level initiatives that are designed to close equity gaps while providing support and creating a community of belonging among diverse student groups. The University of Illinois (UI) System's Access 2030 Strategic Plan is a comprehensive initiative designed to close the graduation rate gap between underrepresented minorities and non-underrepresented minority students by 2030 and increase the number of graduates from underrepresented groups by 50 percent by the end of the decade. This initiative will strengthen the University of Illinois' commitment to the public good and help build upon ongoing efforts to create more opportunities for Illinoisans of all backgrounds. The initiative is being tooled to close equity gaps throughout the pipeline, working from K-12 through college, including community colleges. In addition to Access

2030, the University of Illinois System is engaged in various programs and support initiatives aimed at student recruitment and retention. One such program is Salute to Academic Achievement (SAA). Since 1984, SAA has hosted an annual event to recognize the academic achievements of talented high school students from traditionally underrepresented minority groups and from underrepresented counties in Illinois. Participants have the opportunity to meet with UI System admissions, financial aid, and housing representatives. Participants also receive fee waivers for future admissions applications for each university along with an individualized Certificate of Academic Achievement. In fall 2024, 4,932 students were invited and 574 attended the event.

To focus efforts on making the campus a place where all people can achieve their full potential through the development of innovative strategies, collaboration, and partnerships, the University developed the Office of the Vice Chancellor for Diversity, Equity, and Inclusion (OVCDEI). The OVCDEI, which includes the Office for Access & Equity, the Title IX Office, Office of Academic Inclusive Excellence, and the Office for Business, Community & Economic Development, leads the University's efforts to achieve "an increasingly diverse and inclusive community that is open, just, and welcoming for all." Other initiatives include Disability Resources & Educational Services (DRES), the oldest collegiate disability support program in the world. The DRES continues to be a leader in postsecondary education for persons with disabilities and provides an array of programs and services for differently abled students. Similarly, the Illinois Scholars Program (ISP) aims to combine opportunity, access, experiential learning and support to position students for academic success and personal growth throughout their time at the University. During a four-week intensive summer bridge experience, incoming freshman are matched with an ISP Mentor, receive personalized math and writing instruction, and build a strong relationship with peers to support them during their first year. This inclusive academic support continues throughout their undergraduate experience. The Jeffries Center (formerly known as the Office of Minority Student Affairs) also provides academic coaching, tutoring, graduate school preparation, and scholarship sourcing opportunities for all students.

In alignment with the University's equity plan, UIUC participates in the American Talent Initiative, a coalition of top universities committed to enhancing the recruitment, enrollment and graduation of high-achieving lower and moderate-income students. Additionally, the University is part of the Association of Public and Land Grant Universities Powered by Publics (APLU PxP). The goals of APLU PxP are to produce several hundred thousand more degrees by 2025; eliminate the achievement gap for low-income, minority, and first-generation students; and expand access to higher education for students from all backgrounds. Approximately 130 universities and state systems participate in 16 transformation "clusters." UIUC leads the Big Ten Academic Alliance (BTAA) cluster, which involves studying retention and persistence rates to identify barriers faced by students pursuing degree advancement. The University has utilized this data to examine foundational course curriculum and determine additional support needed for students in these courses. This has culminated in a project called the Inclusive Course Redesign Initiative (ICRI) which implements a process of intentionally designing course materials and activities to be more welcoming and accessible to all students, regardless of their backgrounds or abilities. ICRI began in spring 2023 focused on inviting faculty to consider course redesign with equity and inclusion at the core. By working in partnership with the Center for Innovation in Teaching and Learning (CITL), instructors can create more equitable learning environments that support the success of all learners. Inclusive course redesign involves changes to course syllabi, assessments, and classroom policies.

Several high-impact practices exist at the institution, college, department, and program level. The Office of Undergraduate Research is guided by the philosophy that all Illinois undergraduate students should learn about current disciplinary research, take part in research discussions, and be exposed to research experiences in their regular coursework. The presence of

a substantial research or discovery experience is an integral part of the BSLAS in MCB + DS program where students will gain the skills to present data in meaningful ways. The School of MCB provides extensive undergraduate laboratory research experience for all students in its programs, both in the form of course-based laboratory research experiences and experiential training in faculty research laboratories through study abroad opportunities and internships at various local or regional hospitals, clinical laboratories, and governmental or non-governmental organizations.

The proposed program will also address Goal 2, Sustainability, of *A Thriving Illinois* to *build a stronger financial future for individuals and institutions by finding ways to reduce the financial burden of education on students and their families*. The University of Illinois System and the University of Illinois Urbana-Champaign have been committed to implementing strategies to make college more affordable, particularly for those who have been historically underserved. The President's Award Program (PAP) and PAP Honors provide financial support for students admitted to one of the University of Illinois Systems' three institutions from historically underrepresented groups. The PAP award ranges from \$5,000 to \$10,000 per year available for a maximum of four years. The University participates in the State of Illinois AIM HIGH Grant program, which provides merit-based financial assistance to students who qualify based on state eligibility requirements.

Recognizing the barrier that affordability creates to higher education, the University of Illinois Urbana-Champaign has increased its portfolio of financial support for students. The University provides over \$519 million annually in financial aid funding to undergraduate students, with 72 percent of students receiving some type of aid. Nearly \$203 million of that funding comes from institutional sources, with the vast majority provided to Illinois residents as need-based grants and scholarships. Two signature financial aid programs implemented by the University include Illinois Promise and Illinois Commitment. Since 2005, the Illinois Promise program has covered tuition, campus fees, room/board, and books/supplies through a combination of federal, state, and institutional grants and a \$2,500 Federal Work-Study award to Illinois residents whose family income is at or below the federal poverty level. The Illinois Commitment program began in 2019 and provides a combination of federal, state, and institutional grants to cover tuition and campus fees for Illinois residents whose family income is \$67,100 or less. Of the 2022-2023 cohort of Illinois Commitment recipients, 36 percent identify as Hispanic, 29 percent as White, 18 percent as Black/African American, 14 percent as Asian, and three percent identify as two or more races. The Chancellor's Access Grant doubled from \$2,500 to \$5,000 for the 2022-2023 academic year. This grant further assists Illinois residents from historically underrepresented groups and allows students to supplement this award with other institutional awards.

In addition to the financial support efforts provided by the campus and the College of Liberal Arts and Sciences, the School of MCB provides students with fellowship support for summer research and undergraduate work-study opportunities such as hourly assistant positions in the Instructional Program curricular and advising offices and preparatory assistant positions for laboratory courses. The School of MCB also offers ample hands-on, course-based laboratory experiences to build foundational molecular and cellular biology skills that are critical for securing employment in the competitive job market.

The proposed degree program will contribute to Goal 3, Growth, of *A Thriving Illinois*, to *increase talent and innovation to drive economic growth*. The University of Illinois Urbana-Champaign has strong business and industry partnerships through statewide initiatives such as the Discovery Partners Institute (DPI) and the Illinois Innovation Network (IIN). As a key gubernatorial initiative, DPI's Tech Talent Lab and immersion programs engage with Chicago's technology workforce allowing students to interact with Chicagoland technology and innovation culture. Students make

meaningful connections with regional employers and industries, university research teams, civic and non-profit organizations, and startups that will lead to employment and talent retention in the region. Notably, many MCB faculty have translational research projects funded by the DPI that seek to bridge the academic-industry application divide. IIN works to enrich the student experience through short-term boot camps around topics such as artificial intelligence, data science, entrepreneurship, and more. These intensive programs encourage students' interest in topics that are key to the 21st century economy and provide a foundation for continued study.

UIUC has additional partnerships in the community with Research Park, the Campus Community Compact, and PK-12 programming overseen by the Associate Chancellor for PK-12 Initiatives. As a crucial hub that provides meaningful and industry-focused research and internship opportunities, Research Park employs 800 interns year-round in part-time employment allowing UIUC's undergraduate and graduate students to work on campus and be enrolled as full-time students. Students are paid highly competitive wages for their specialized skill sets in areas such as computer science, data analytics, UX/UI design, engineering, business development, and market research. Research Park internships increase students' employment prospects by expanding their professional networks, building their professional portfolios, and developing their leadership skills. In the 2022-2023 academic year, Research Park hosted 33 exclusive recruiting events for its employers and attended 11 careers fairs on campus to promote Research Park internships to students. Several MCB faculty members, current students, and alumni have strong connections with startup companies associated with the EnterpriseWorks incubator in Research Park. Over 70 percent of startup companies that graduate from EnterpriseWorks remain within Illinois. In addition, many of the School of MCB's current students and graduates find employment with corporations in Research Park. Students in the proposed program will have access to the same opportunities to engage with local companies or form their own startups. University faculty and student entrepreneurs have opportunities to participate in the Illinois I-CORPS training program, which is part of the National Science Foundation Great Lakes Regional I-CORPS Hub. This training helps researchers gain valuable insight into entrepreneurship, starting a business, industry requirements, and challenges associated with moving promising research ideas from the laboratory to the marketplace. Some MCB faculty members have participated as mentors or technical advisors for local, regional, or national I-CORPS programs. The School of MCB provides extensive undergraduate laboratory research experience for all students in its programs. Approximately 45 summer research fellowships are awarded for students to work in faculty laboratories. As part of this experience, students participate in laboratory meetings, journal clubs, seminars, and research conferences.

Moreover, the Illinois Reboot tech training program provides a free course in data science literacy to Central Illinois professionals who are underrepresented in technology and seeking to upskill their careers. Since its inception in 2020, Reboot has completed 6 cohorts and trained 175 community members, 63 percent from underrepresented populations. Reboot also provides career coaching and access to Research Park data science professionals. Another local program, We CU, supports long-term partnerships among local organizations, instructors, and students at the University. These mutually beneficial partnerships create impactful learning experiences for students and promote positive change in the Urbana-Champaign community. Since 2020, 3,152 students from 12 colleges have dedicated 56,115 hours to 798 service projects. In 2024, 84 students were recognized as We CU Community Engaged Scholars and completed an additional 8,615 service hours.

Comparable Programs in Illinois

In Illinois, three institutions offer undergraduate programs in the 26.0406 – Cell/Cellular and Molecular Biology Classification of Instructional Programs (CIP) category (Bradley University, Illinois State University, and the University of Illinois Urbana-Champaign) and three institutions offer undergraduate programs in the 30.7001 – Data Science CIP category (Dominican University, Knox College, and Olivet Nazarene University). The proposed program is most closely related to these programs; however, based on available information, the proposed combination of molecular and cellular biology with data science is the first of its kind in Illinois at the bachelor's level. Thus, the BSLAS in MCB + DS program will provide a distinct learning experience for students that fuses biological sciences, chemistry, physics, statistics, math, and data science.

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The program is consistent with the purpose, goals, objectives, and mission of the University. The requested degree title reflects the program's objectives and curriculum.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.

1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

Applicants interested in the BSLAS in MCB + DS program must meet the general admission requirements of the University and the School of Molecular and Cellular Biology. The application process is handled by the Office of Undergraduate Admissions (OUA). The University recommends four years of the following courses, but the minimum high school course requirements for admission are: four years of English; three or more years of mathematics; two years of social sciences, laboratory sciences, and a language other than English; and two years of flexible academic units.

The School of MCB broadly evaluates inter/intra-collegiate transfer candidates. Applicants from other colleges and universities are expected to have the same requirements as those from on campus. The University offers several outreach and recruitment programs geared toward historically underrepresented populations. The University of Illinois Urbana-Champaign has

adopted the Common App to encourage high school graduates to remain in Illinois and enroll at UIUC. The University also developed a test-optional policy in which ACT/SAT scores are not required for first-year applicants or for merit-based and honors programs. OUA has dedicated teams to enhance the recruitment and enrollment of underrepresented groups. In 2024, these teams included three groups on African American, Native American, and Latinx Recruitment and Yield. The objective is to assemble stakeholders from campus sectors with underrepresented populations to foster ongoing dialogues and collaborations as well as devise innovative recruitment and enrollment strategies.

Furthermore, the Parkland Pathway program allows students to dual enroll at Parkland College and UIUC with the option to live in university residence halls. There are also intensive advising partnerships with the City Colleges of Chicago, Danville Area Community College, Illinois Central College, and Rock Valley College. UIUC recently implemented Public Act 102-0187, the Public University Uniform Admission Pilot, which guarantees transfer students admission to the University if they meet minimum requirements. The School of Molecular and Cellular Biology has embraced the overall goals of the University to expand student access for high-achieving, low and moderate-income students by engaging in several efforts to enhance recruitment.

Curriculum

The Bachelor of Science in Molecular and Cellular Biology + Data Science is a 120 credit-hour program that includes 40 hours (minimum) of upper-division coursework. The program combines a strong foundation in molecular and cellular biology with training in data science principles, techniques, and practices. The program includes a core of MCB courses, some with laboratory components and some without, along with additional data science coursework requirements and a research or discovery experience working with data in context. Graduation requirements include:

- General Education and free elective coursework
- Data science core (29-30 hours)
- MCB core coursework (17 hours)
- Chemistry core (10 hours)
- Advanced MCB courses (11 hours)
- Research or discovery-based coursework (6 hours)

Ubiquitous digital technology and the generation of massive amounts of biological and environmental data that impact biological systems are rapidly transforming society and multiple fields of inquiry. Data science is ushering in a new era of modern medicine, where algorithms, artificial intelligence, machine learning, high-throughput genomics, and other data-driven technologies are revolutionizing how physicians and other healthcare providers identify, treat, and manage diseases. By offering the proposed program, UIUC will prepare students to lead society's digital transformation.

The School of Molecular and Cellular Biology has embraced the overall goals of the University to expand support for student access, especially underrepresented students by engaging in several efforts to enhance recruitment and retention. The School of MCB hired an Assistant Director for Curriculum and Instruction + Diversity, Equity, Inclusivity who is also the Director of the Merit Program for Emerging Scholars, an enrichment and cohort-building program for undergraduates from groups that have been historically underrepresented in science, math, and engineering. The assistant director supports DEI-related goals within the School's curricula; develops and implements policies that foster understanding, adoption, and adherence to DEI best practices;

organizes campuswide lectures, workshops, professional networking, and DEI trainings to welcome and help retain underrepresented students in STEM majors; and serves on the School's diversity committee. In addition, the Jeffries Center (formerly the Office of Minority Student Affairs) has embodied the University's land-grant mission by championing access for all students and providing a comprehensive array of college preparatory and support services to bolster student success. The School of Molecular and Cellular Biology works closely with the Jeffries Center to provide support and academic services for underrepresented students.

Assessment of Student Learning

The University of Illinois Urbana-Champaign has established processes to measure and analyze student learning outcomes. The program learning objectives will be assessed in groups of three or four each academic year. Students will be assessed on a course-by-course basis using direct measures such as performance on formative and summative assessments, laboratory research data collection and presentations in the form of posters presented at research symposia. The information collected will be used to adjust course content as needed.

Program Assessment

The program will be reviewed and evaluated annually by the instructional program leadership team within the School of MCB. The program coordinator will work with the leadership team, faculty, and advisors/counselors to monitor student progress and program effectiveness. The team and program coordinator will meet with each student on a semiannual basis (at least once per semester) to assess the student's academic performance, engagement in career and professional development activities, plans for future semesters, plans for gaining any necessary certifications or examination credentials for future advanced studies or professional careers, and satisfaction with the curriculum and personnel. Students in the program will have access to a career coach in the School of MCB for additional counseling if needed.

Annual focus groups will be conducted for feedback on students' perceptions of the program. First destination data will be collected to capture post-graduate outcomes. Patterns in matriculation to institutions and degree programs will be monitored to better understand how the program connects students to their future careers. The data will inform ongoing course revision and program improvement.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high-quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

Existing facilities are sufficient for implementing the proposed program. The School of Molecular and Cellular Biology has no plan to renovate space as a result of the creation of the proposed program. The existing instructional spaces are well suited for program instruction and research. The University possesses appropriate library resources with access to online databases, books, journal holdings, and other electronic resources to support teaching and scholarly work. The

Funk Library offers extensive learning resources for students in the School of Molecular & Cellular Biology. The Biology Virtual Library maintains access to a comprehensive set of biology collections through NCBI databases, PubMed, Scopus, and the Web of Science platform.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

The University has identified institutional policies that ensure faculty and staff possess the training, credentials, and other related qualifications to provide instruction at the institution. Existing faculty in the School of Molecular and Cellular Biology will provide instruction for the proposed program along with two new faculty in RNA Biology, Genomics, and Informatics. A formal faculty evaluation process is in place. To encourage faculty development, the School of MCB has award nomination and selection committees that recognize excellence in research, teaching and service at the departmental and school levels.

The UI System and the University have strategies in place to attract and retain diverse faculty, staff and administrators including women, individuals with disabilities, veterans, persons of color, and members of other underrepresented groups. The Distinguished Faculty Recruitment Program has a stated goal of increasing underrepresented minority faculty. Since 2017, the UI System has committed \$31.4 million to the program for the recruitment of tenured, star, or rising faculty from a range of disciplines who can transform the universities by their exceptional scholarship and teaching. One criterion is that the faculty member “will enhance diversity in the unit and in the college.” Additionally, the Public Voices Fellowship is a year-long program that coaches a diverse group of tenured faculty to increase their influence as thought leaders at the University and beyond.

As a campus, the University of Illinois Urbana-Champaign is committed to investing in strategic hiring of faculty to maintain the institution’s academic strengths and respond to student demand. Investments from the Office of the Provost in faculty hiring, retention, and development are critical to maintaining and enhancing the academic excellence of the campus, especially at a time when the competition for top talent is intense. The Next 150 strategic plan includes a major hiring initiative to expand faculty hiring in key areas over the next five years, with the goal of expanding the overall size of faculty. Though all faculty hiring is a department and college-level decision, the campus has devoted significant resources to incentivize hiring activities that support diversity, recruitment, and retention goals. The Targets of Opportunity Program (TOP) offers ongoing financial support in the form of salary funds to facilitate the recruitment of faculty who

enhance campus diversity with a specific focus on underrepresented groups and women in STEM fields. The Office of the Provost also provides recurring matching funds for the Dual Career Program in the amount of one third of the initial salary if the partner is hired into a tenure track position through the program. The program was recently extended to include non-recurring funds for partner hires in non-tenure track positions. Furthermore, the University supports the Underrepresented Faculty Recruitment Program in allocating non-recurring funds for research to enhance offers of employment. Awards up to \$20,000 per year of the first three years of employment were available for those hired in the 2022-2023 academic year.

Additional retention efforts include programming and development activities for executive officers and faculty members across ranks. Programming and resources for unit executive officers equip them with the knowledge and skills necessary for leadership including ways to enhance their ability to support and mentor faculty within their units, particularly faculty members of color. The Office of the Provost coordinates several leadership development programs to increase the pool of potential academic leaders on campus with an intentional focus on supporting faculty members from marginalized and underrepresented groups to explore campus leadership and administrative roles. Efforts to recruit and retain faculty members of color are monitored through data collected by the Division of Management Information and Office for Access and Equity. Additionally, a yearly report on hiring and retention of women faculty of color is released and disseminated through the Women at Illinois report.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

The University has adequate faculty, staff, and other instructional resources to administer the proposed program. The program will be supported by existing faculty and staff. There will be no impact on teaching loads. The Departments of Mathematics, Statistics, and Computer Science and the School of Information Science are combining efforts to provide support for advising in data science.

Accreditation and Licensure

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

There is no specialized accreditation or licensure required for the proposed program.

Program Information

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit

of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Detailed information about the proposed program, including a description of the admission policies, university policies, tuition, fees, and curriculum will be published on the University's website.

Staff Conclusion

The staff concludes that the Bachelor of Science in Liberal Arts and Sciences in Molecular and Cellular Biology + Data Science proposed by the University of Illinois Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

Proposed Degree Title in the Region of Authorization: Master of Science in Global Studies in the Prairie Region

Projected Enrollments and Degrees

First Year Enrollment	Fifth Year Enrollment	Degrees Awarded Fifth Year
15	60	45

Background

The University of Illinois Urbana-Champaign (UIUC or the University) is seeking authorization to offer a Master of Science (MS) in Global Studies in the Prairie region. The proposed program will be housed in the College of Liberal Arts and Sciences (LAS) within the Center of Global Studies (CGS). CGS is one of the units in the Illinois Global Institute (IGI). All IGI units are organized around the principle that a public university has a responsibility to its communities to foster global understanding and engagement. Since its inception, the unit has promoted the study of human development in international settings relating to gender, cultural, economic, legal, moral, political, social, and technological dimensions. The MS in Global Studies will provide a graduate degree option that supplements the Bachelor of Arts in Liberal Arts and Sciences (BALAS) in Global Studies and the undergraduate certificate in Global Security. The proposed program will build upon existing programs in the Center of Global Studies including the Global Studies graduate minor, the Gender Relations in International Development graduate minor, the Arms Control and Domestic and International Security (ACDIS) program, and the Women and Gender in Global Perspectives (WGPP) program.

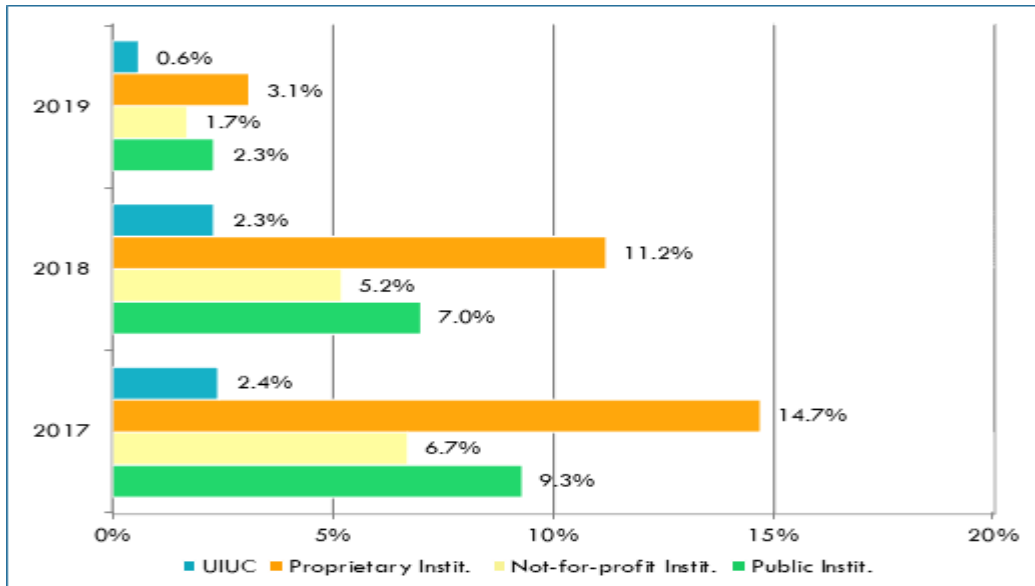
Over the past decade, Global Studies has emerged as an interdisciplinary field exploring the impact of globalization and issues that affect the world's diverse populations at local, national, regional, and global levels. Government agencies, businesses, non-governmental organizations (NGOs), trade associations, academic institutions, and not-for-profit (NFP) organizations have an increasing need for professionals with specialized training in cultural and global engagement to address critical world issues. The Master of Science in Global Studies program will meet workforce needs by producing broadly educated and well-trained scholars, practitioners, and professionals with essential skills in international politics, economics, world cultures and languages to address emerging challenges in the global community.

Institutional Data

1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider these factors based on results for similar institutions. (i) Graduation rates, certificate and degree completion rates, retention rates, and pass rates for licensure and certification aligned with thresholds set by State nor national regulatory bodies. (ii) The success rate shall be, at a minimum, higher than those of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

This section includes information about institutional and student success measures for the University of Illinois Urbana-Champaign. The institution's rates will be compared to Illinois institutions from within a select comparison group and against the national standards or averages. For a proposed undergraduate program, this section will include undergraduate graduation rates, first to second year retention rates, student loan default rates, and any applicable licensure passage rates. For a proposed graduate program, this section will primarily focus on student loan default data since this measure also includes graduate students in the calculation.

Three-Year Cohort Student Loan Default Rate



Source: National Center for Education Statistics (NCES), US Department of Education

Note: Due to the pause on federal student loan payment that began in March 2020, the cohort default rate for fiscal year 2020 is zero percent for the institution and all institution types. The national cohort default rate for fiscal year 2019 was 2.3 percent and zero percent for fiscal years 2020 and 2021. A lower number is a positive indicator.

The three-year cohort student loan default rate is the percentage of a school's borrowers who enter repayment on certain Federal Loan Programs during a particular federal fiscal year, October 1 to September 30, and default or meet other specified conditions prior to the end of the second following fiscal year.

Need

1050.30(a)(6): A) The unit of instruction, research or public service is educationally and economically consistent with the educational priorities and needs of the State of Illinois. B) The unit of instruction, research or public service meets a need that is not currently met by existing institutions and units of instruction, research or public service.

Global Studies is a field that identifies processes, problems, and policy solutions which are global in scope and impact requiring departures from traditional national and international frameworks of analysis. Thus, there is a broadening spectrum of undergraduate and graduate programs in Global Studies across higher education institutions in the United States and abroad. In recent years, the BALAS in Global Studies at the University of Illinois Urbana-Champaign has attracted over 250 majors in varied disciplines from colleges and departments across campus. Establishing the MS in Global Studies program will provide future opportunities to recruit and retain undergraduate students to earn a joint degree (BALAS/MS) in Global Studies at the University. The program aims to enhance the disciplinary and professional credentials of students in providing the interdisciplinary knowledge and intercultural skills necessary to analyze and solve contemporary world problems. The competencies developed in the program will prepare students for careers in business, communications, academia, immigration services, international affairs, law, public health, and sustainable development, among other areas. Job titles related to Global Studies that fall within the U.S. Bureau of Labor Statistics' occupational categories include political analysts and scientists, environmental scientists and specialists, sociologists, urban and regional planners, foreign service officers/diplomats, international development specialists, humanitarian affairs officers, intelligence analysts, international program managers, environmental policy advisors, urban

development specialists, public affairs specialists, social affairs officers, human rights officers, international student advisors, communications specialists, and international affairs liaisons. According to the U.S. Bureau of Labor Statistics, these occupations have a projected growth of up to 5.6 percent by 2032 with salaries averaging over \$100,000 per year. The MS in Global Studies program will provide a valuable resource to employers by enlarging the pool of graduates with specific skills and topical area knowledge to address global challenges and excel in areas such as intelligence analysis, foreign service, political-military affairs, law enforcement, corporate security, and cyber-intelligence security.

A Thriving Illinois: Higher Education Paths to Equity, Sustainability, and Growth

Supportive of IBHE's *A Thriving Illinois: Goal 1, Equity, to close equity gaps for students who have historically been left behind*, UIUC received the designation as a First-gen Forward institution in 2022 by the Center for First-generation Student Success, an initiative of the Student Affairs Administrators in Higher Education and the Suder Foundation. The University of Illinois Urbana-Champaign was one of 53 institutions named to the First-gen Forward 2022-23 cohort, the nation's first recognition program acknowledging higher education institutions for their commitment to first-generation student success. In 2023, the inaugural Director of First-Generation Student Initiatives was hired to lead programming and service delivery to the undergraduate first-generation student community. UIUC also established a first-generation steering committee to work with the University's Center for First-Generation Student Success to establish goals, identify barriers, and create improvement projects to enhance the experience of first-generation students on campus. The steering committee launched the Insights Tool, a comprehensive diagnostic self-assessment for members of the community to share information about institutional efforts to support first-generation students.

Moreover, to further the University's commitment to close persisting equity and opportunity gaps in faculty and staff hiring, UIUC coordinated several leadership development programs to increase the pool of potential academic leaders on campus with an intentional focus on supporting faculty members from underrepresented groups to explore campus leadership and administrative roles. For example, many faculty and staff are fellows in the Big Ten Academic Alliance's Academic Leadership Development Program, a comprehensive leadership development program designed for faculty and higher education administrators to gain a better understanding of university-level academic administrative leadership and its challenges.

At the department level, the Illinois Global Institute and its units (including the Center of Global Studies) have prioritized recruiting and retaining faculty, staff, and administrators of color. To capitalize on these efforts, the IGI organized a Diversity, Equity, and Inclusion committee comprised of staff and students. This is IGI's first standing committee beyond its core governance structure with a focus on coordinating and elevating efforts across IGI units to avoid issues of microaggression, promote recruitment of underrepresented faculty and staff, and implement pipeline programs.

In alignment with *A Thriving Illinois: Goal 2, Sustainability, to build a stronger financial future for individuals and institutions by finding ways to reduce the financial burden of education on students and their families*, the University of Illinois Urbana-Champaign offers a variety of scholarships and fellowships to make college more affordable for underserved students. The University offers a Graduate College Fellowship which provides financial support to students from historically underrepresented groups. These awards include a \$20,000 annual stipend for 1 year (master's degree students) and a \$25,000 annual stipend for 3 years (doctoral students) along with

additional funding commitments from academic departments for the remaining years of graduate study. A total of \$3.5 million of campus funds are allocated to these fellowships annually.

To further expand opportunities for participation, tuition generated from the MS in Global Studies will provide need-based funding to qualifying students. Additionally, students enrolled in the program will be eligible for grant funded scholarships through longstanding programs such as the U.S. Department of Education's Title VI Foreign Language and Area Studies Fellowship. In 2022, the Center for Global Studies was awarded a 4-year Foreign Language and Area Studies (FLAS) grant that provides nearly \$1.4 million in student awards supporting approximately 56 research, travel, and language study fellowships, student research awards, and tuition scholarships. The FLAS fellowships support the study of critical languages for students' research and professional development. FLAS fellows are selected based on a combination of merit and need.

The MS in Global Studies will contribute to *Goal 3 of A Thriving Illinois, Growth, to increase talent and innovation to drive economic growth*. The proposed program will augment the extensive partnerships between UIUC and local, regional, and state employers by providing meaningful and industry-focused research and internship opportunities to students. UIUC's Research Park employs 800 interns in part-time employment, allowing undergraduate and graduate students to work on campus and be enrolled as full-time students. Students are paid highly competitive wages for their specialized skill sets in computer science, data analytics, engineering, business development, and market research. Research Park internships increase students' employment prospects by expanding their professional networks, building their professional portfolios, and developing their leadership skills.

Another local program at the University, We CU, supports long-term partnerships among local organizations, instructors, and students. These mutually beneficial partnerships create impactful learning experiences for students and promote positive change in the University community. Since 2020, 3,152 students from 12 colleges have dedicated 56,115 hours to 798 service projects. In 2024, 84 students were recognized as We CU Community Engaged Scholars and completed an additional 8,615 service hours.

Comparable Programs in Illinois

Presently, there are four institutions with comparable master's programs in Illinois (one out-of-state institution and three independent, not-for-profit institutions). UIUC would be the only public institution offering the MS in Global Studies in Illinois. The proposed program is distinct in its focus on developing professional leadership and policy expertise in partnership with the ACDIS and WGGP programs. The MS in Global Studies will include three thematic concentrations in global security, gender and public policy, and global governance that embeds interdisciplinary coursework with domestic and international practicum opportunities to prepare students to work in intercultural environments. Providing additional educational opportunities in global studies at UIUC will meet growing labor needs for graduates with expertise in language, culture, and global competence.

Comparable Programs			
Institution	Degree	Region	Sector
DePaul University	M.A. in International Studies	Chicago	Independent, Not-for-profit
Loyola University of Chicago	M.A. in International Relations and Affairs M.A. in International/Global Studies	Chicago	Independent, Not-for-profit

University of Chicago	M.A. in International Relations	Chicago	Independent, Not-for-profit
Webster University (MO)	M.A. in International Relations	Southwestern	Out of State

Source: IBHE Program Inventory

Mission and Objectives

1050.30(a)(1): A) The objectives of the unit of instruction, research or public service are consistent with the mission of the college or university. B) The objectives of the unit of instruction, research or public service are consistent with what the unit title implies.

The proposed program aims to develop professionals with the ability to engage in global issues that challenge humanity on local, national, and international levels. Guided by principles in the University's strategic plan, the overarching objective of the MS in Global Studies is to capitalize on scholarly synergies across campus, provide new educational pathways that enhance current programs across disciplines, and develop students who will become future leaders with global impact.

Curriculum and Assessment

1050.30(b)(1) [applicable only to units of instruction]: A) The caliber and content of the curriculum must assure that the objectives of the unit of instruction will be achieved. B) The breadth and depth of the curriculum must be consistent with what the title of the unit of instruction implies. C) The admission and graduation requirements for the unit of instruction must be consistent with the stated objectives of the unit of instruction. D) Institutions must show the capacity to develop, deliver and support academic programs. Procedures and policies that will assure the effective design, conduct and evaluation of the degree programs under the academic control of the institution must be developed. Assessment plans must demonstrate that the institution has identified clear and appropriate program and student learning goals and has defined appropriate outcomes. Appropriate data must be collected and may be requested by the Board to show the level of student learning that has occurred as a result of participation in the institution's programs of study.

1050.30(a)(2): The design, conduct and evaluation of the unit of instruction, research or public service are under the direct and continuous control of the sponsoring institution's established processes for academic planning and quality maintenance.

Admission Requirements

Applicants must meet general requirements for the Graduate College and program-specific requirements for admission to the Master of Science in Global Studies program. Applicants must hold a bachelor's degree from a four-year college or university or its equivalent that is accredited by the appropriate regional accrediting association and must demonstrate proficiency in a second language (non-native English speakers are exempt from this requirement). For students not meeting the second language requirement, an elective language course may be completed or reading and writing activities in association with meeting the professional development or professional skills requirement. GRE scores (verbal, quantitative and written) are recommended but not required. International students are required to take the Test of English as a Foreign Language (TOEFL) with minimum scores set by the Graduate College. Applicants must submit an application for admission,

certified transcripts of all undergraduate work, a writing sample, three letters of reference, and a purpose statement.

Curriculum

The MS in Global Studies is a professional graduate degree that is complementary to the BALAS in Global Studies and undergraduate certificate in Global Security. The proposed program will include three concentrations: global security, gender and public policy, and global governance. The specialized curriculum will include an exploration of national, international, and global security; gender equity issues in research and policy analysis from gender, cultural, economic, legal, moral, political, social, and technologic dimensions; and policy issues related to global governance at international, transnational, state, and domestic levels. The program will require 32-credit hours consisting of 12 hours of core courses, four hours specific to the student's area of specialization, and 16 credit hours of elective courses. Core courses include a guided practicum or capstone project. The global studies practicum provides an opportunity for students to build their professional capacity by allowing students integrate theory and knowledge of course content with the application of principles and practices in a professional setting. The program will partner with established organizations within the international policy community such as Peaceworks, Chicago Council on Global Affairs, Southern Voice, and the On Thinks Tank network to provide professional field experiences for students.

The University has developed a network of programs, resources, and campus services to support student learning and research, effective teaching, and student success. The Michael L. Jeffries Sr. Center for Access and Academic Success (formerly known as the Office of Minority Student Affairs) provides a comprehensive array of support services to bolster student success including tutoring, advising, and mentoring programs. In addition to the robust student support services provided by the University, the Center for Global Studies offers individualized academic advising and career placement support. Pre-professional work and internship opportunities are available to Global Studies affiliated programs. In addition, CGS collaborates with career services organizations on workshops for public service careers that support areas of national need and includes representatives from the Peace Corps, U.S. Department of State, Central Intelligence Agency, United Nations as well as NGOs.

Assessment of Student Learning

Students must complete each required course with a C or better and have an overall GPA of at least 2.75 to earn a Master of Science degree in Global Studies. Direct measures of assessment include assignments, exams, project reports, and presentations. Student learning will be assessed annually against the following program learning goals and outcomes:

- Students will be well-versed in the field and become familiar with foundational texts of Global Studies that identify the pathways and dynamics of globalization and trace their impact and the governance of globalization across the full range of scales, from global to planetary.
- Students will think critically about how globalization impacts global order, welfare, and legitimacy.
- Students will become ethically engaged by becoming familiar with the historical, ethical, and philosophical questions underlying research in the field of Global Studies, and their impact on the framing of analytical questions and the gathering and analysis of data on problems that are global in scale and scope.

- Students will gain practical experience in collecting, analyzing, and evaluating data on key global challenges of the 21st century using a range of analytical tools.
- Students will translate the skills and knowledge gained in the classroom into professional experiences focused on solutions to problems that are global in scope and benefit from Global Studies' perspectives and approaches.

Additionally, surveys from students and employers will be used to evaluate program effectiveness. The MS in Global Studies program coordinator will collect and track the following data to assess the program: number of students enrolled in the degree, students' demographic information, distribution of students across colleges and major fields of study, courses taken, and post-graduate employment information. This data will be shared with program faculty and staff at an annual meeting.

Program Assessment

Program evaluation will take place in a two-year rotation. A macro-level analysis of the curriculum will be conducted in the first year and the second year will consist of a more comprehensive analysis of course content and syllabi. In both years, an agile assessment and action process will occur resulting in programmatic or course changes as needed to improve student learning. An assessment and action report will be prepared each spring by the program coordinator in consultation with the MS in Global Studies curriculum committee and shared with IGI and CGS leadership.

Facilities (space, equipment, instructional materials)

1050.30(a)(4): A) Facilities, equipment and instructional resources (e.g., laboratory supplies and equipment, instructional materials, computational equipment) necessary to support the high-quality academic work in the unit of instruction, research or public service are available and maintained. B) Clinical sites necessary to meet the objectives of the unit of instruction, research or public service. C) Library holdings and acquisitions, owned or contracted for by the institution, that are necessary to support high quality instruction and scholarship in the unit of instruction, research and public service, are conveniently available and accessible, and can be maintained.

Current facilities are adequate to support the proposed program which will be housed in the Illinois Global Institute at Coble Hall with office space and administrative support from CGS, WGGP, and ACDIS. These offices will be used for student advising and program meetings. Instructional facilities and technologies will be supported through the College of Liberal Arts and Sciences which has over 50 buildings on campus. Students in the MS in Global Studies program will also have access to the Applied Technology for Learning in the Arts and Sciences Office that provides online and hybrid learning support services. Instruction will be supported by the University's Center for Innovation in Teaching and Learning.

UIUC's library has extensive research collections subscribing to 73 global studies-related online databases that provide full text and bibliographical access to Columbia International Affairs Online (CIAO), Organisation for Economic Co-operation and Development (OECD) iLibrary and Public Affairs Information Service (PAIS) Index. The library also has large collections of documents related to Global Studies from the OECD, World Bank, International Labour Organization (ILO), International Monetary Fund (IMF), Organization of American States (OAS) and General Agreement on Tariffs and Trade/World Trade Organization (GATT/WTO). Additionally, the library has access to journals such as Global Networks, International Journal of Interdisciplinary

Global Studies, Global Studies Law Review, Global-e, Globalizations, Identities: Global Studies in Culture and Power, Journal of Environment and Development, Journal of Global History, Journal of World-Systems Research, New Global Studies, and Third World Quarterly.

In 2011, the University of Illinois Library formed the International and Area Studies Library (IASL) to coordinate patron and research focused services while continuing to build nationally prominent collections of materials from outside the United States. The IASL curates a collection of materials that consist of nearly two million volumes in over 150 languages which will support the Master of Science in Global Studies program. Collections are focused on African Studies; East Asian Studies; European Union Studies; Global Studies; Latin American and Caribbean Studies; Middle East and North African Studies; Russian East European and Eurasian Studies; and South Asian Studies. The IASL works closely with the International Global Institute to provide students with the resources they need to succeed. The proposed program was organized in conjunction with the Head of the International and Area Studies Library and Global Studies subject specialist who is also the faculty sponsor for the program. The Global Studies subject specialist librarian will provide research assistance to students, faculty, and staff.

Faculty and Staff

1050.30(a)(3): A) The academic preparation and experience of faculty and staff ensure that the objectives of the unit of instruction, research or public service are met. B) The academic preparation and experience of faculty and staff, as evidenced by level of degrees held, professional experience in the field of study and demonstrated knowledge of the field, ensure that they are able to fulfill their academic responsibilities. At a minimum, faculty shall have a degree from an institution accredited by a U.S. Department of Education and/or Council for Higher Education Accreditation recognized accrediting body or a degree from another country evaluated for U.S. equivalency in the discipline they will teach or for which they will develop curricula at least one level above that of the courses being taught or developed. C) The involvement of faculty in the unit of instruction, research or public service is sufficient to cover the various fields of knowledge encompassed by the unit, to sustain scholarship appropriate to the unit, and to assure curricular continuity and consistency in student evaluation. E) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, that are directly assigned to the unit of instruction, research or public service, have the educational background and experience necessary to carry out their assigned responsibilities.

The existing personnel of CGS, ACDIS, WGGP, and LAS Global Studies will support the proposed program. Core courses will be taught by qualified faculty in co-applicant programs. The University has institutional policies that ensure faculty and staff possess the training, credentials, and other related qualifications for program instruction and implementation. A formal faculty evaluation process and reward structure is in place. Through a partnership with the University System Office and departments, the provost supports the Underrepresented Faculty Recruitment Program in making available non-recurring funds for research to enhance offers of employment. Additional retention efforts include programming and development activities for executive officers and faculty members across ranks. Programming and resources for unit executive officers equip them with the knowledge and skills necessary for leadership including ways to enhance their ability to support and mentor faculty within their units, particularly faculty members of color. The Office of the Provost also coordinates several leadership development programs to increase the pool of potential academic leaders on campus with an intentional focus on supporting faculty members from marginalized and underrepresented groups to explore campus leadership and administrative roles.

In collaboration with other departments at the University, the Master of Science in Global Studies program will have access to 79 courses across 22 units for students to complete the elective course sequence. The program coordinator will manage admissions, financial aid, and advising in consultation with CGS, ACDIS, and WGGP directors as well as faculty advisory board subcommittees. The program coordinator will also provide career advising and practicum placement assistance. This role will begin as a 0.5 full-time equivalent position transitioning to full time by the fifth year of the program. Supplemental academic advising and career placement support will be provided by the assistant and associate directors of CGS, ACDIS, and WGGP. This advising will ensure students have access to the courses and experiential learning opportunities that most closely match their career goals.

Fiscal and Personnel Resources

1050.30(a)(5): A) The financial commitments to support the unit of instruction, research or public service are sufficient to ensure that the faculty and staff and support services necessary to offer the unit of instruction, research or public service can be acquired and maintained. B) Projections of revenues necessary to support the unit of instruction, research or public service are based on supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

The proposed program is not requesting new state funds. Courses for the MS in Global Studies program were developed through Title VI grant funding from the U.S. Department of Education. A portion of this funding will also be used for instruction during the first two years of the program and 10 percent of the program coordinator's initial salary. Once these funds are exhausted, the program will be sustained through tuition income. Tuition generated by the program will provide both need and merit-based fellowships to qualifying students.

As a program in the College of Liberal Arts and Sciences, the MS in Global Studies will have access to LAS facilities, teaching technologies and equipment. The proposed program will be administered by the Illinois Global Institute which utilizes a shared services model. The shared service model applies to business operations, grant administration, human resources, fellowship coordination and office administrative support. This model avoids duplication within units by providing services across all units, and in the case of office support, across clusters of units.

Accreditation and Licensure

1050.30(b)(3)[applicable only to units of instruction]: Appropriate steps shall be taken to assure that professional accreditation needed for licensure or entry into a profession as specified in the objectives of the unit of instruction is maintained or will be granted in a reasonable period of time.

There is no specialized accreditation or licensure for the proposed program.

Program Information

1050.30(b)(2)[applicable only to units of instruction]: A) The information which the institution provides for students and the public shall include the following: i) An accurate description of the unit of instruction, including its objectives, length, and residency requirements if any; ii) Schedule of tuition, fees, and all other charges and expenses necessary for completion of the unit of instruction, cancellation and refund policies; iii) Student rights and responsibilities; iv) A statement regarding the transferability

of college credits, including the fact that the decision to accept transfer credits is determined by the receiving institutions; v) A statement as to how the institution will advise students on the nature of the transfer process, including the importance of consulting with institutions to which the student may seek to transfer; vi) Evidence of arrangements for the transfer of courses or credits or both to institutional counterparts, when these arrangements exist; these arrangements are also known as articulation agreements; vii) A statement of the institution's most recent graduation rates and the number of graduates and enrollments as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS) and any submission of data to satisfy Board reporting requirements; and viii) Other material facts concerning the institution and the unit of instruction as are likely to affect the decision of the student to enroll. B) The information listed in subsection (b)(2)(A) shall be available to prospective students prior to enrollment and shall be included in the institution's catalog of programs.

Detailed information about the proposed program including a description of the admission policies, university policies, tuition, fees, and curriculum will be published on the University's website.

Staff Conclusion

The staff concludes that the Master of Science in Global Studies in the Prairie region proposed by the University of Illinois Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.