Board Secretary Melissa Bealon

Item #E-1 Month 12, 2025

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

Submitted for: Action.

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

# Action Requested: That the Illinois Board of Higher Education approves the following:

Eastern Illinois University

- Bachelor of Applied Arts and Sciences in Cybersecurity
- Bachelor of Social Work in the Prairie Region

University of Illinois Urbana-Champaign

• Bachelor of Science in Materials Science and Engineering + Data Science 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 oncampus 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

• Bachelor of Applied Arts and Sciences in Cybersecurity

Eastern Illinois University (EIU or the University) is seeking authorization to offer a Bachelor of Applied Arts and Sciences in Cybersecurity (BAAS in Cybersecurity) in the Prairie region. This program focuses on the principles and techniques used to identify, search, seize and analyze digital media and conduct cyber investigations against criminal and terrorist activity. The program is designed to meet the needs of working professionals, specifically those that have not yet completed a bachelor's degree. The proposed program requires 120 credit hours including the major core of 30 credit hours divided between the foundation core of 18 credit hours and 12 credit hours of the cybersecurity internship or credit for prior learning (CPL). The foundation core requires courses in data communications technology, database administration, and cybersecurity intrusion detection and prevention. The remaining nine hours will be selected from five other courses (MIS 4850, MIS 4860, MIS 4960, EGT 4823, and TEC 3414).

In addition, all students must complete the undergraduate degree requirements included in the EIU undergraduate catalog, which includes finishing all general education requirements; all major course requirements; 30 credit hours in residence; 40 credit hours of upper division courses; and 12 credit hours in residence in courses applicable to the major. The BAAS in Cybersecurity includes instruction in computer boot processes and drives, jumper setting, file access and reconstruction, hacking, network systems, cryptography, programming, investigative techniques, forensic imagery, web-based investigation methods, cyberterrorism, and applicable laws and administrative procedures. Graduates will be prepared to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation, auditing, and maintenance of security devices, systems, and procedures.



The University has proposed equity strategies to close gaps in enrollment, persistence, and completion of degrees in the field. Robust strategies exist within the proposed program's curricular and academic support plans to promote student success. 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 to support the program.

• Bachelor of Social Work

Eastern Illinois University (EIU or the University) is seeking authorization to offer a Bachelor of Social Work (BSW) in the Prairie region. This interdisciplinary degree program provides a range of options with a flexible curriculum to meet the needs of undergraduate students who seek career opportunities in the field of social work. In addition to offering a generalist curriculum in social work, the proposed program allows students to pursue their interests by choosing among seven different elective areas including addictions, gerontology, child welfare, criminology, health, nutrition, and policy and advocacy. The proposed program requires completion of 120 credit hours including 61 credits in the major. Through broad training and opportunities for concentration areas, the proposed program will prepare students for both entry-level positions in the social work field and advanced study.

The University has proposed an equity plan and strategies to support traditionally underrepresented students as well as robust curricular and academic support services to promote student success. 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, staff, and financial resources to support the program.

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

# University of Illinois Urbana-Champaign

• Bachelor of Science in Materials Science and Engineering + Data Science in the Prairie Region

The University of Illinois Urbana-Champaign (UIUC or the University) requests authorization to offer a Bachelor of Science in Materials Science and Engineering + Data Science (BS in MatSE + DS) in the Prairie region. The program will be housed in the Department of Materials Science and Engineering within the Grainger College of Engineering. The 128-credit hour program combines a strong foundation in materials science and engineering with training in data science principles, techniques, and practices. The curriculum blends core course requirements with 69 credit hours of materials science and engineering courses and 29 hours of data science courses. Graduates of this unique program will be prepared to meet the demand for positions involving modeling, simulation, analysis of materials informatics, and use of computational methods. 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 B.



The staff recommends adoption of the following resolution:

The Illinois Board of Higher Education hereby grants to Eastern Illinois University authorization to establish the Bachelor of Applied Arts and Sciences in Cybersecurity and the Bachelor of Social Work in the Prairie region subject to the institution's implementation and the 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 the University of Illinois Urbana-Champaign authorization to grant the Bachelor of Science in Materials Science and Engineering + Data Science 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: Bachelor of Applied Arts and Sciences in Cybersecurity in the Prairie Region

First Year Enrollment	Fifth Year Enrollment	Degrees Degrees Awarded Fifth Yegr
5	40	15

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### Background

Eastern Illinois University (EIU or the University) is seeking authorization to offer a Bachelor of Applied Arts and Sciences in Cybersecurity (BAAS in Cybersecurity) in the Prairie region. This program focuses on the principles and techniques used to identify, search, seize and analyze digital media and conduct cyber investigations against criminal and terrorist activity. The BAAS in Cybersecurity includes instruction in computer boot processes and drives, jumper setting, file access and reconstruction, hacking, network systems, cryptography, programming, investigative techniques, forensic imagery, web-based investigation methods, cyberterrorism, and applicable laws and administrative procedures. Graduates will be prepared to assess the security needs of computer and network systems, recommend safeguard solutions, and manage the implementation, auditing, and maintenance of security devices, systems, and procedures.

The BAAS in Cybersecurity will be housed in the School of Technology within the Lumpkin College of Business and Technology. This program will be a robust and much-needed offshoot of the Bachelor of Science (BS) in Computer and Information Technology (CIT) program, a wellestablished and popular undergraduate major at EIU. While the extant BS in CIT program offers broad preparation in multiple areas of information technology, it serves an undergraduate population that needs more familiarity with information technology coursework, industry practices, and cybersecurity in particular. Conversely, the BAAS in Cybersecurity will serve a different audience, one that is not currently served by the BS in CIT program. The BAAS in Cybersecurity will be uniquely suited to working professionals seeking to complete their bachelor's degree who have some, if not substantive, workplace opportunities to apply the principles and best practices of the IT industry and keen interest in earning certification as cybersecurity experts.

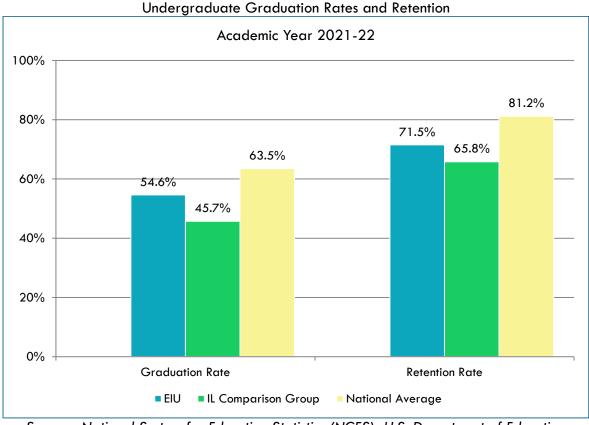
The BAAS in Cybersecurity fully aligns with EIU's mission to offer accessible education by offering students the opportunity to work directly with faculty experts in the field of cybersecurity, complete their degree online while they continue to work as busy professionals, and enter the program with the clear goal of reaching a career milestone (e.g., certification or managerial credential).

### 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.



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

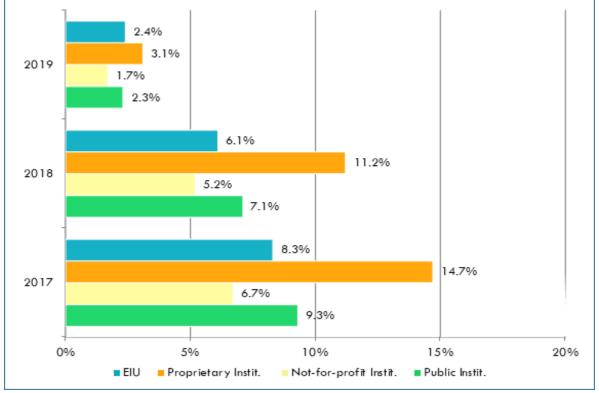
Retention rates examine the percentage of first-time degree seeking students enrolled in the fall of the prior year that are still enrolled in the fall of the current year. The national standard for retention rates is reported annually by NCES.



Undergraduate	Completions	per	100 FTE
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Academic Year	Eastern Illinois University	Comparable Illinois Institutions
2021-2022	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.



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.

According to the U.S. Bureau of Labor Statistics, employment opportunities for cybersecurityrelated professions are expected to increase threefold over the next decade. On average, at the national level, the projected growth for Information Security Analysts is 33 percent from 2023-2033. The Illinois Department of Employment Security also predicts, among all computer occupations within the state, the highest annual compound growth for cybersecurity professions (2.12 percent) from 2022-2032. There is a significant and growing demand for professionals with a cybersecurity background.

Regionally, there is a rising demand for cybersecurity expertise in Charleston, Illinois and the surrounding East Central Illinois region. Eastern Illinois University's proposed Cybersecurity BAAS program is positioned to fulfill this demand through its existing and potential partnerships with local organizations, including healthcare facilities such as Sarah Bush Lincoln Health Center and Carle Foundation Hospital, educational institutions such as Charleston School District and Lake Land College, as well as government agencies and private companies focused on cybersecurity and IT services. Companies like Consolidated Communications, Rural King, and First Mid Bank & Trust are also present in the region and increasingly require skilled cybersecurity personnel to safeguard their digital assets.

Illinois Employment Projections, 2022-2032			
Occupation Title Employment 2022 Employment (%)			
Information Security Analysts	4,771	5,882	1,111 (23.29%)
Computer Applications, All Other	8,717	9,168	451 (5.17%)
All occupations	6,369,370	6,538,492	169,122 (2.6 %)

Source: Illinois Department of Employment Security

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

The proposed Bachelor of Applied Arts and Sciences in Cybersecurity supports Goal 1, Equity, of A Thriving Illinois, to close 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.

Over the past decade, EIU has expanded its student success metrics by monitoring 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 academic standing or progression. Data is 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. This enables analysis of 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 traditionally underrepresented students. 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, onestop, online student services website.

In further support of Equity, EIU has taken several innovative steps to reach working professionals who have not yet completed their bachelor's degree. Most pointedly, EIU has expanded its degree completion programs and moved them fully online. A few years ago, EIU's only degree completion options were the Bachelor of General Studies (now Interdisciplinary Studies), and the RN-to-BSN program taught at off-site locations, but the University now offers an array of degree completion programs that are fully online, including the proposed BAAS in Cybersecurity, designed with working professionals in mind.

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.

Additionally, EIU recently expanded its EIU Promise Scholarship program to make college more affordable and accessible for students, especially prospective first-time and transfer students from Illinois. Departing from comparable programs at other universities, the EIU Promise Scholarship excludes counting assets toward the adjusted gross income threshold; this makes college more affordable by removing the penalty against families with savings, farms, and small businesses. Also, as part of the AIM HIGH Grant program, the adjusted gross income threshold increased from \$66,000 to \$80,000 for the 2025-26 school year. In addition to these scholarship programs, EIU's admissions team has created online resources to support candidates of color. For example, the Scholarship Office created a web resource for minority candidates that aggregates outside scholarship resources. Similar online resources have been developed for undocumented students, veterans, and children of veterans.

EIU has also been able to serve its most disadvantaged students through two IBHE grants: the End Student Housing Insecurity Grant (2023-24) which helped hundreds of EIU students with emergency funds and provided funding for a major expansion of the Campus Food Pantry; and



the Co-operative Work Study Grant (2024-25) "Working for a Healthy Rural Illinois," that funded internships for ten students at local health agencies including several county public health agencies, local hospitals, and advocacy and crisis centers.

The proposed program will contribute to Goal 3, Growth, of A Thriving Illinois, to increase talent and innovation to drive economic growth. The proposed BAAS in Cybersecurity equips students for careers in cybersecurity and related IT fields, as well as opportunities for advanced study in the discipline. Students will acquire a broad range of skills and essential knowledge, enabling them to effectively contribute to IT and cybersecurity industries. The program is designed to provide non-traditional undergraduate students with impactful learning experiences, including hands-on activities, industry certifications, real-world projects, research mentoring, and internship opportunities. By successfully engaging in these experiential and industry-focused training experiences, graduates will be prepared for thriving careers in the IT and cybersecurity field.

The BAAS in Cybersecurity program addresses vital societal needs by offering a comprehensive curriculum that incorporates cultural and liberal arts elements, lifelong learning opportunities, and civic engagement. The curriculum also emphasizes critical thinking, ethical decision-making, and an understanding of the societal implications of cybersecurity. This framework aims to produce well-rounded cybersecurity professionals who can analyze intricate societal challenges and develop effective solutions.

# **Comparable Programs in Illinois**

There are currently 18 comparable bachelor's degree programs in Illinois (six at public universities and 12 at independent universities). One program is offered in the Prairie region at Millikin University (BA and BS in Cybersecurity). There are no programs offered in Illinois with the 43.0403 Classification of Instructional Programs (CIP) code. While some programs have similar titles, they are classified under different CIP codes and feature curricula centered around computer science or cybersecurity policies and law, which differs from the proposed program. EIU's BAAS in Cybersecurity will be the only online undergraduate program of its kind at a public four-year university in Illinois catering to non-traditional students.

# **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

The online Bachelor of Applied Arts and Sciences in Cybersecurity is a completion program designed for IT/Cybersecurity professionals or those with related college coursework. Program admission is granted to applicants meeting one of the following requirements: a minimum of 30 transferable college credit hours of IT/Cybersecurity technical course work, three years of full-time work experience in IT/Cybersecurity, or at least one industry standard IT/Cybersecurity certification including but not limited to CompTIA A+, CompTIA Security+, Cisco Certified Network Associate, GIAC Information Security Fundamentals, ISC2 System Security Certified Practitioner, EC-Council Certified Ethical Hacker or similar certification listed in the University catalog. These plans and policies directly address students that have not yet received a post-secondary degree/credential and works to bring back working adults as students, while recognizing and valuing their unique family, work, and community experience and needs. Potential students must also meet the general admission requirements listed in the University catalog.

# Curriculum

The BAAS in Cybersecurity emphasizes the study of security principles including infrastructure, forensics, evaluation of risks, and security influence on business operations. Students will learn the fundamentals of data and information security, hardware and software security, and systems and network security. The program requires 120 credit hours including the major core of 30 credit hours divided between the foundation core of 18 credit hours and 12 credit hours of a cybersecurity internship or credit for prior learning. CPL may be used to gain credit for required or elective courses in the major. For students who hold IT or cyber-related professional positions, internship hours can be completed by working on special projects for the student's employer. The foundation core requires courses in data communications technology, database administration, and cybersecurity intrusion detection and prevention. The remaining 9 hours will be selected from five other courses (MIS 4850, MIS 4860, MIS 4960, EGT 4823, and TEC 3414).

In addition, all students must complete the undergraduate degree requirements included in the EIU undergraduate catalog, which includes finishing all University general education requirements; all major course requirements; 30 credit hours in residence; 40 credit hours of upper division courses; and 12 credit hours in residence in courses applicable to the major.

### Assessment of Student Learning

Eastern Illinois University has proposed plans to assess student learning. Assessment methods include multiple, discipline-specific direct and indirect measures to review student performance and



outcomes. Students in the program will be expected to gain technical knowledge and skills to defend systems and networks, develop plans to monitor and implement cybersecurity mechanisms to help ensure the protection of information technology assets, and remediate security breaches. The learning activities require students review and respond to case studies, write research papers, pass exams, participate in group projects, and report on internship activities. Students are expected to have 75% or greater proficiency in learning activities

### **Program Assessment**

The assessment plan for the BAAS in Cybersecurity will be reviewed and updated annually by the Computer Information Technology Assessment committee. Assessment data focusing on student learning objectives identified in the Cybersecurity major assessment plan will be collected annually by faculty instructing the required core as well as the internship site supervisor.

Using the appropriate report template (non-accredited program report), a biennial Cybersecurity major assessment report will be submitted every other year (year two and year four) by the computer information technology program coordinator to the associate dean of the College. The associate dean (in consultation with the dean of the College) will review the biennial Cybersecurity major assessment report and provide feedback. The report will then be forwarded to a staff member from the Office of Academic Affairs, who will review the report and provide additional feedback. The dean and vice president of academic affairs will review the Cybersecurity major assessment report and discuss the feedback with the Computer Information Technology program coordinator prior to the annual upload of the report to the website for transparency and sharing. Any course or program revisions will go through the standard curriculum revision oversight process at the University. This process includes departmental-level evaluation, College Curriculum Committee oversight, and the Council on Academic Affairs (CAA) review and approval process.

# 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 BAAS in Cybersecurity is delivered entirely online, eliminating the need for physical space or lab equipment. However, the proposed program will utilize online resources provided by EIU, including the library, D2L Brightspace, and textbook rental services. All students have access to the extensive resources available in the EIU Booth Library collection. As stated on its website, the library houses over 1,000,000 cataloged items, including maps, music scores, and pamphlets that align with the University's educational goals. The public catalog for Booth Library is part of I-Share, a statewide network encompassing 91 academic and research libraries in Illinois. Additional electronic resources offer online access to a wide range of periodicals and subject databases. Interlibrary loan services enhance Booth Library's offerings by providing access to materials from other libraries. Booth Library is supported by dedicated staff who assist students and faculty in navigating library resources. The reference department offers personalized assistance, instructional



materials, and orientation tours, as well as specialized research clinics by appointment. Students can reach reference staff via the web, phone, or fax for support.

## **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.

Courses for the proposed program will be taught by faculty within the Computer Information Technology program, incurring no additional costs. 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 have the appropriate qualifications. A formal faculty evaluation process is in place. All faculty at Eastern Illinois University meet the guidelines established by the University's accrediting body, the Higher Learning Commission.

All contracted, tenured, and tenure-track faculty are evaluated annually and may apply for promotion and professional advancement increases as appropriate through the guidelines established in the contract between the University administration and the University Professionals of Illinois. Eastern Illinois University supports faculty development through its Faculty Development and Innovation Center (FDIC) devoted to faculty professional development activities. In addition, the University provides research release and research grant opportunities as well as professional travel support to enhance faculty development.

In 2019, the University initiated a Higher Learning Commission Quality Initiative (QI) that resulted in the formulation of a campuswide 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 ElUnity Conference that occurs each spring in partnership with the Office of Inclusion and Academic Engagement. In 2019, the Office of Academic Affairs also launched employee affinity groups to create new opportunities for employees to connect and interact.

### **Fiscal and Personnel Resources**

Eastern Illinois University will not be requesting additional financial resources from the state of Illinois to support this program. Current budgets are adequate to support this new major. Current faculty and staff are sufficient to implement the program. As this program is a part of the existing BS in Computer Information Technology, there is no budget increase required to implement the program.

### 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 proposed BAAS in Cybersecurity program requires no specialized accreditation.

# **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 Bachelor of Arts and Applied Sciences in Cybersecurity 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.

**Proposed Degree Title in the Region of Authorization:** Bachelor of Social Work in the Prairie Region

Projected Enrollments and Degrees			
First Year Fifth Year Degrees Awarded			
Enrollment	Enrollment	Fifth Year	
25	75	50	

### Background

Eastern Illinois University (EIU or the University) is seeking authorization to offer a Bachelor of Social Work (BSW) in the Prairie region. EIU students with an interest in social work have typically majored in sociology or human services. Mindful of this institutional history, the proposed program was developed collaboratively by the Department of Human Services and the Department of Sociology, Anthropology, and Criminology. The program will accept applicants who have declared a major in human services or sociology and meet other admissions criteria.

The proposed interdisciplinary degree program provides a range of options with a flexible curriculum to meet the needs of undergraduate students who seek career opportunities in the field of social work. In addition to offering a generalist curriculum in social work, the program allows students to pursue their interests by choosing among seven different elective areas including addictions, gerontology, child welfare, criminology, health, nutrition, and policy and advocacy. Through broad training and opportunities for concentration areas, the proposed program will prepare students for both entry-level positions in the social work field and advanced study.

The Bachelor of Social Work includes coursework from programs in the College of Liberal Arts and Sciences and the College of Health and Human Services. Given the human services focus of the BSW, the program will be housed in the Department of Human Services within the College of Health and Human Services. The program will feature high impact practices such as research mentoring, student scholarship, practicum work with community organizations, and experiential learning to fulfil the University's mission of offering superior education through student-faculty scholarship and applied learning experiences.

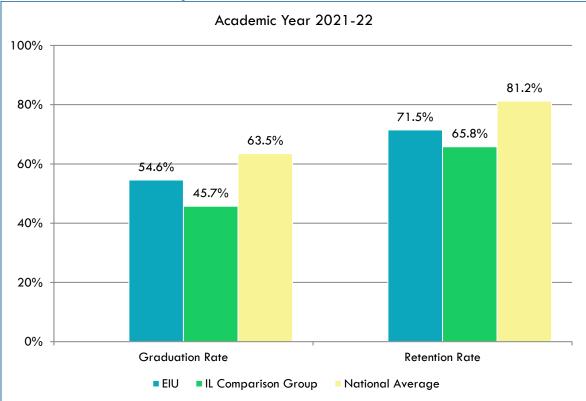
### Institutional Data

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.



Undergraduate Graduation Rates and Retention

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).



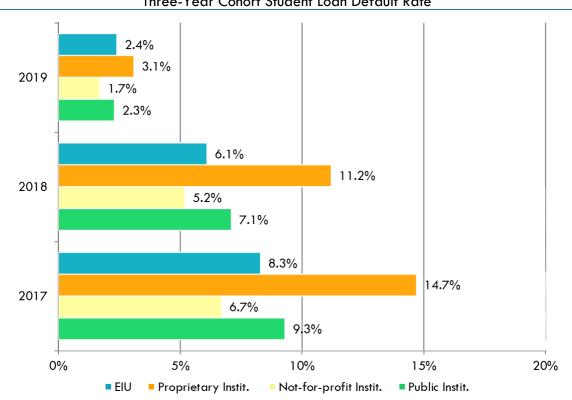
### **Undergraduate Retention Rate**

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 FTE

Academic Year	Eastern Illinois University	Comparable Illinois Institutions
2021-2022	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.



### 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.

Graduates of the proposed program will be employable in many sectors of social work, human services and related industries. Careers in social work and social services are projected to grow seven percent in the next 10 years, faster than the average of other occupations, according to the Bureau of Labor Statistics (BLS). According to BLS, about 63,000 job openings for social workers are projected each year. The Illinois Department of Employment Security predicted that between 2020 and 2030, counselor and social work positions will increase by 10.84 percent. Strong growth is also expected for social work graduates with expertise in mental health and substance abuse (14.49 percent), healthcare (6.3 percent), and probation or correctional treatment (8.57 percent). These national and state projections highlight a growing need for social work professionals.

Locally, there is high demand in East Central Illinois for social work graduates. In 2021, the American Association of Medical Colleges reported that Illinois has the capacity to meet only 24 percent of mental health needs due to the workforce shortage. This is especially true in rural areas. According to the Behavioral Health Workforce Center, there are approximately 9.8 million people who live in mental health care shortage areas.

In the broader East Central Illinois region, there are a variety of agencies that EIU has existing relationships with, including hospitals (Carle Hospital, Sarah Bush Lincoln Health Center, and Saint Anthony's Hospital); mental health clinics (Elliott's Counseling, The Pavilion Behavioral Health Center, and Life Links); children's advocacy organizations (Children's Advocacy Centers); child welfare providers (Cunningham Children's Home, the Department of Children and Family Services, One Hope United, Lutheran Family Services, and Caritas Family Solutions); gerontology organizations (Coles County Council on Aging and Lifespan Center); schools (Charleston School District); adult protection organizations (All Care Horizons); correctional facilities (Lawrenceville, Danville, Taylorville, and Greensville); and drug and alcohol treatment centers (Central East Alcoholism and Drug Council, Lincoln Recovery, and Rosecrance). The proposed BSW would provide numerous opportunities to maintain and develop partnerships with these agencies. Agency administrators have expressed support for the proposed program.



Illinois Employment Projections, 2022-2032			
Occupation Title	Employment 2022	Employment 2032	Employment Change (%)
Counselors & Social Workers/Specialists	84,727	91,471	6,972 (6.3%)
Child, Family & School Social Workers	16,345	16,975	630 (3.8%)
Mental Health & Sub Abuse Social Workers	1,725	1,919	194 (11.2%)
All occupations	6,369,370	6,538,492	169,122 (2.6 %)

Source: Illinois Department of Employment Security

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

The proposed Bachelor of Social Work supports Goal 1, Equity of A Thriving Illinois to close the equity gaps for students who have historically be 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.

Over the past decade, EIU has expanded its student success metrics by monitoring 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 academic standing or progression. Data is 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. This enables analysis of 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 traditionally underrepresented students. 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, onestop, online student services website.

In further support of Equity, EIU has taken several innovative steps to reach working professionals who have not yet completed their bachelor's degree. Most pointedly, EIU has expanded its degree completion programs and moved them fully online. A few years ago, EIU's



only degree completion options were the Bachelor of General Studies (now Interdisciplinary Studies), and the RN-to-BSN program taught at off-site locations, but the University now offers an array of degree completion programs that are fully online and designed with working professionals in mind.

Since the proposed program is tailored specifically for non-traditional students, it offers considerable curricular flexibility within its framework. Students can earn 12 credit hours through non-traditional avenues, including credits for prior learning, internships, industry projects, or industry certifications. Furthermore, students have the option to customize their degree by selecting one or two elective minors as needed to meet the total requirement of 120 credits.

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.

Additionally, EIU recently expanded its EIU Promise Scholarship program to make college more affordable and accessible for students, especially prospective first-time and transfer students from Illinois. Departing from comparable programs at other universities, the EIU Promise Scholarship excludes counting assets toward the adjusted gross income threshold which makes college more affordable by removing the penalty against families with savings, farms, and small businesses. Also, as part of the AIM HIGH Grant program, the adjusted gross income threshold increased from \$66,000 to \$80,000 for the 2025-26 school year. In addition to these scholarship programs, EIU's admissions team has created online resources to support candidates of color. For example, the Scholarship Office created a web resource for minority candidates that aggregates outside scholarship resources. Similar online resources have been developed for undocumented students, veterans, and children of veterans.

EIU has also been able to serve its most disadvantaged students through two IBHE grants: the End Student Housing Insecurity Grant (2023-24) which helped hundreds of EIU students with emergency funds and provided funding for a major expansion of the Campus Food Pantry; and the Co-operative Work Study Grant (2024-25) "Working for a Healthy Rural Illinois," that funded internships for ten students at local health agencies including several county public health agencies, local hospitals, and advocacy and crisis centers.

The proposed degree program will contribute to Goal 3, Growth, of A Thriving Illinois, to increase talent and innovation to drive economic growth. Student interest in social work programs has grown as evidenced by increasing internet searches for "social work" programs within the EIU data system as tracked by the EIU Office of Enrollment. Investments to support the behavioral health workforce are critical at this time. According to the Illinois Behavioral Health Workforce Center (2024), due to the shortage of social workers, Illinois residents have experienced increases in anxiety, depression, and substance abuse which signals the need to train more social workers to meet workforce demand.

The proposed BSW has been designed to provide undergraduate students with high-impact, hands-on learning experiences. As a requirement of the program, students must complete 400 practicum hours under the supervision of a licensed clinical social worker. These experiential learning



hours will develop qualified graduates who are prepared to succeed in a career pathway as a licensed clinical social worker, pursue advanced graduate school training, or find employment in the broad social services sector. EIU has hired two faculty members with Master of Social Work (MSW) degrees; one will serve as the social work program director, and the other will serve as the social work field director. The field director will build upon EIU's existing relationships with agencies and organizations who have expressed interest in working with BSW students. Further, EIU has secured an adjunct faculty member in human services who is the CEO at a community counseling clinic in the region and another adjunct who is an administrator at One Hope United. Faculty experts in the field will contribute to students' education while creating strong connections between the classroom and workforce to help drive the Illinois economy.

### **Comparable Programs in Illinois**

There are currently 27 comparable bachelor's degree programs in Illinois (eight programs at public universities and 19 programs at 15 independent universities). Only two programs are offered in the Prairie region at the University of Illinois Urbana-Champaign (Bachelor of Social Work) and Millikin University (Bachelor of Arts and Bachelor of Science in Social Work).

EIU's interdisciplinary Bachelor of Social Work program is well-positioned to serve the broader East Central Illinois region and surrounding areas. Millikin University is a small, private college and the University of Illinois Urbana-Champaign is a large, research-intensive public university. In contrast, EIU has a small faculty-student ratio and serves a large first-generation student population. The University also shares a commitment to student success, research, and community service. The proposed program at EIU would offer a more affordable education option for students preparing graduates for career opportunities in the social work profession.

# **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

Students who pursue the Bachelor of Social Work degree must meet the following minimum admission standards at Eastern Illinois University: a 2.8 high school GPA and completion of Eastern Illinois University's recommended high school preparation. Standardized test scores are not required for admission. Prospective students must be a declared major at EIU in either human services or sociology and have a cumulative 2.5 GPA at the time of application to the program. The proposed program at EIU will not accept transfer students until the program has been accredited. Prerequisite coursework (HSL 1800, HSL 2820, SOC 1838G, and PSY 1879G) must be completed with a grade of C or better. Prerequisite courses with an earned grade of D, F, or W may not be repeated more than once to receive a passing grade of C or higher. The highest grade earned in a repeated course will be used for GPA calculation.

Admission to the program is competitive and will be based on, but not limited to, courses taken, cumulative GPA, essay, and references. The proposed program reserves the right to limit the size of the entering class. Admission is determined by the committee. Applicants will be notified after March 1 of the committee's admission decision. Qualified students not accepted will be placed on a waiting list. Students may only reapply once for admission and re-applicants will be newly ranked relative to the cohort of prospective students. As per accreditation requirements, students admitted to the BSW program must pass a background check.

#### Curriculum

The Bachelor of Social Work program prepares students with knowledge and skills for generalist social work practice, careers in social services, and graduate study in social work. The program offers a broad curriculum in social work with the flexibility for students to choose specialized electives in their area of interest. Delivery mode (face-to-face, online, and hybrid) varies by course and semester. All currently offered prerequisite courses and additional major requirement courses are delivered face-to-face, with five courses (HSL 1800, HSL 2820, PSY 1879G, PSY 3780, and SOC 1838G) having online options during the academic year (including the summer semester). Elective options are extensive, with delivery modes varying depending on the course. The curriculum is aligned with the Council on Social Work Education (CSWE) 2022 Educational Policy and Accreditation Standards.

Students must complete 61 credit hours for the major, which includes six credit hours of courses that satisfy the general education requirements. Students must earn a C or better in the prerequisite courses required for admission to the major and social work courses, maintain an overall cumulative 2.5 GPA, and complete 400 hours of direct service experience. Students must complete at least 40 semester hours of upper-division coursework (3000-4000) and successfully complete at least 120 hours with a cumulative 2.5 GPA.



#### Assessment of Student Learning

Students in the proposed program will be evaluated utilizing multiple, disciplineappropriate measures of student learning that emphasize direct and indirect measures. EIU has mapped the five overarching University Learning Outcomes (critical thinking, writing and critical reading, speaking and listening, quantitative reasoning, and responsible citizenship) to specific core courses required for the program. The University also follows CSWE Educational Policy and Accreditation Standards, including nine specific competencies that students must demonstrate during the major coursework and required practicum. Student performance on assessments in 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.

#### **Program Assessment**

The proposed assessment plan for the BSW program will be reviewed and updated annually by program faculty. Assessment data focusing on student learning objectives identified in the Social Work major assessment plan will be collected annually by faculty teaching the required core courses as well as site supervisors once the first group of students enroll in practicum courses. Using the appropriate report template (accredited program report), a biennial Social Work major assessment report will be submitted every other year (year two and year four) by the Department of Human Services to the associate dean of the College of Health and Human Services. In year two of the planned program assessment, the associate dean, in consultation with the dean of the College of Health and Human Services, will review the biennial Social Work major assessment report and provide feedback. In year three, the social work program director, working with the department chair in human services and the faculty/chair in the sociology, anthropology, and criminology department will apply for accreditation after submitting benchmark one and two to the Council on Social Work Education. The Social Work major assessment report will be reviewed again in year four resulting in a report that will be forwarded to a staff member in the Office of Academic Affairs for additional feedback. The dean and vice president of academic affairs will also review the Social Work program assessment report and discuss feedback as well as any necessary changes to determine program improvements.

A newly developed College of Health and Human Services advisory board will serve as an external evaluator of the proposed program and provide external guidance and direction on professional and industry needs. The University will also seek input from the board regarding diversity, equity and inclusion initiatives within health sciences. The board will meet biannually.

Any course or program revisions will go through the standard curriculum revision oversight process at the University. This process includes departmental-level evaluation, College Curriculum Committee oversight, and the Council on Academic Affairs (CAA) review and approval process. The University will also request that practicum site supervisors provide learning objective evaluations for social work students that will be integrated and evaluated in annual departmental assessments. After accreditation, the University will work with the Council on Social Work Education to ensure curriculum revisions align with CSWE's mission and 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 at EIU will accommodate the proposed BSW program, including classrooms and administrative offices. Many of the courses will be taught in Klehm Hall, Blair Hall, or other buildings on campus. All buildings provide high-quality classroom space with appropriate technology to support and enhance student learning and faculty innovations in teaching. There is no additional administrative space needed to support the program.

All students have access to the extensive resources available in the EIU Booth Library collection. As stated on its website, the library houses over 1,000,000 cataloged items, including maps, music scores, and pamphlets that align with the University's educational goals. The public catalog for Booth Library is part of I-Share, a statewide network encompassing 91 academic and research libraries in Illinois. Additional electronic resources offer online access to a wide range of periodicals and subject databases. Interlibrary loan services enhance Booth Library's offerings by providing access to materials from other libraries. Booth Library is supported by dedicated staff who assist students and faculty in navigating library resources. The reference department offers personalized assistance, instructional materials, and orientation tours, as well as specialized research clinics by appointment. Students can reach reference staff via the web, phone, or fax for support.

### **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 advance through established criteria in teaching, research,



and service. All faculty at Eastern Illinois University meet the guidelines established by the University's accrediting body, the Higher Learning Commission.

All contracted, tenured, and tenure-track faculty are evaluated annually and may apply for promotion and professional advancement increases as appropriate through the guidelines established in the contract between the University administration and the University Professionals of Illinois. Eastern Illinois University supports faculty development through its Faculty Development and Innovation Center (FDIC) devoted to faculty professional development activities. In addition, the University provides research release and research grant opportunities as well as professional travel support to enhance faculty development.

The proposed program is interdisciplinary with many elective options from several departments, including nine academic areas across the College of Health and Human Services and the College of Liberal Arts and Sciences. The Bachelor of Social Work program will be housed in the Department of Human Services, an academic unit managed and led by a full-time department chair. The department chair will work in collaboration with the dean and the associate dean of the College of Health and Human Services to monitor and support the proposed program. The provost provides overall guidance to all academic programs at Eastern Illinois University.

In 2019, the University initiated a Higher Learning Commission Quality Initiative (QI) that resulted in the formulation of a campuswide 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 ElUnity Conference that occurs each spring in partnership with the Office of Inclusion and Academic Engagement. In 2019, the Office of Academic Affairs also launched employee affinity groups to create new opportunities for employees to connect and interact.

### **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.

Eastern Illinois University is not requesting additional state funds to support the proposed program. Current budgets are adequate to support the new program. The University has hired one tenure track faculty and one annually contracted faculty to implement the program. Additional costs include those associated with programmatic accreditation. The total estimated cost for the proposed program in the first year is \$26,709 (plus faculty salaries and fringe benefits) and \$4,061 (program membership dues and professional development) in the fifth year.

# 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 seek accreditation from the Council on Social Work Education which is a requirement for graduates to become a Licensed Social Worker (LSW) or Licensed Clinical Social Worker (LCSW) in Illinois as specified in the Clinical Social Work and Social Work Practice Act (225 ILCS 20) and Illinois Administrative Code 68, Part 1470. Illinois licensure requirements for the LSW include a bachelor's or graduate degree in social work from a program accredited by the Council on Social Work Education in addition to official transcripts, an application, a \$50 application fee, a clean criminal background check, and three years of supervised experience. The BSW program at EIU will adhere to all benchmark guidelines and work with CSWE to obtain accreditation. The first group of students admitted into the Bachelor of Social Work program will change their majors from human services or sociology before the final accreditation visit and the completion of benchmark two. CSWE will accept those students as graduating from an accredited program (retroactive one year).

# **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 Bachelor of Social Work 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.



## University of Illinois Urbana-Champaign

**Proposed Degree Title in the Region of Authorization:** Bachelor of Science in Materials Science and Engineering + Data Science in the Prairie Region

First Year	Fifth Year	Degrees Awarded	
Enrollment	Enrollment	Fifth Year	
10	40	10	

Projected Enrollments and Degrees

### Background

The University of Illinois Urbana-Champaign (UIUC or the University) is seeking authorization to offer a Bachelor of Science in Material Engineering + Data Science (BS in MatSE + DS) in the Prairie region. The program will be housed in the Department of Materials Science and Engineering within the Grainger College of Engineering. The BS in MatSE + 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 and Bachelor of Science in Chemical Engineering + Data Science programs were also approved in December 2022 and November 2024, respectively. This program proposal is in response to the University's ongoing examination of its academic portfolio and a response to emerging student demand, societal need, and economic opportunity. In addition, the University's 2018 Strategic Plan, "The Next 150," endeavors to "establish Illinois as the global leader in digital transformation at the service of society" through and in part by bolstering the institution's strength in areas related to data science and "providing all Illinois students the opportunity to have 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 a programmatic academic major domain. The "X + Data Science" family of degrees will prepare Illinois students to lead society's digital transformation.

The evolution of the workforce is moving toward career fields with interdisciplinary skills and the BS in MatSE + DS will prepare students for this change. The blend of data science with materials science training will help prepare the next generation of engineers. Multiple national policy documents have called for an integration of these areas to accelerate the discovery and development of new materials; therefore, being able to gather, organize, interpret, and analyze large amounts of data is becoming an essential skill. There are currently no other programs like the proposed program in Illinois. Thus, the program is poised to position graduates to be in demand by employers and earn high salaries.

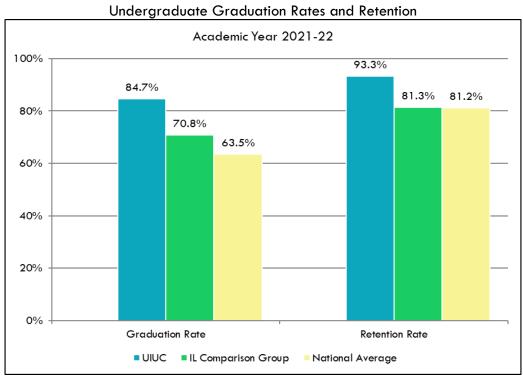
# Institutional Data

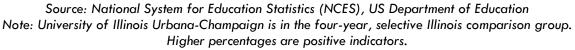
1050.30(b)(1)(H): Success in student progression and graduation rates across all existing approved programs, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, 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 or 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 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).



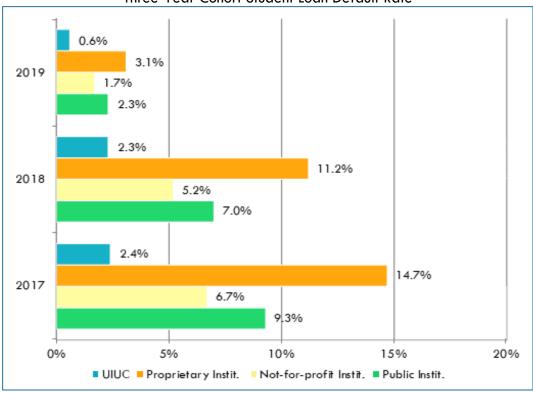
### Undergraduate Retention Rate

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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 TUU FIE			
Academic Year	University of Illinois Urbana-Champaign	Comparable Illinois Institutions	
2021-22	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.



### 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.

Data scientists transform raw data into meaningful, actionable conclusions which is a necessity for modern industries. 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. According to the U.S. Bureau of Labor Statistics (BLS), data science is a growing career market nationwide. In addition, Illinois has one of the largest percentages of job openings related to data science or data analytics in comparison to other parts of the country. The proposed program was developed due to a review of UIUC's academic portfolio coupled with student demand and workforce needs. This innovative, interdisciplinary program will equip students with an increasingly in-demand skill set for the workforce or to meet graduate program qualifications. 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 workforce landscape.

The BLS projects a 36 percent growth in data science occupations and 7.4 percent growth for materials engineers from 2023 to 2033. BLS projects that occupations in data science as well as materials science and engineering will outpace the average growth rate for all occupations. The national projection over the period is a four percent growth rate. The national median earning rate is \$48,060 per year, while data scientists earn \$108,020 annually and materials engineers earn \$104,100. The proposed program will position graduates for in demand, well-paying careers.

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

The University of Illinois (UI) System's Access 2030 Strategic Plan aligns with the goals of IBHE's A Thriving Illinois. In IBHE's Goal 1, Equity, to close equity gaps for students who have historically been left behind, the UI System has a goal to increase the number of graduates from underrepresented groups by 50 percent by the end of the decade. UIUC's diversity, equity, and inclusion work is led by the Office of the Vice Chancellor for Diversity, Equity, and Inclusion (OVCDEI). The office has implemented a variety of efforts and programs to strategically support and improve equity on campus. In July 2020, the University pledged \$2 million annually for the Chancellor's "Call to Action to Address Racism and Social Injustice." The program funded 25 projects focused on three research areas: systemic racism and social justice; law enforcement and criminal justice reform; and disparities in health and health care. In October 2022, OVCDEI hosted an inaugural Research Symposium to present findings and outcomes. In fall 2023, the institution administered a campuswide climate assessment to understand the degree to which students feel safe, accepted, and valued. The survey resulted in working groups focusing on developing frameworks and implementing plans to improve the campus experience for students.



UIUC is focused on closing the graduation gap and increasing student success as an active participant in the American Talent Initiative (ATI). ATI seeks to expand student access at high graduation rate institutions with the goal of enrolling and graduating 50,000 additional highachieving, low and moderate-income students from ATI participating institutions by the year 2025. UIUC is committed to increasing the graduation rate for Pell students to 81 percent for the 2017 cohort and offering targeted opportunities for incoming students to participate in summer scholar bridge programming to increase the number of Pell students enrolling, improve retention rates, and reduce graduation rate gaps for this population. In addition to the ATI program initiatives, the University is a leader in the Association of Public and Land Grant Universities Powered by Publics initiative. This complimentary program's goals are to produce several hundred thousand more degrees by 2025; to eliminate the achievement gap for low-income, minority, and first-generation students; and expand access to higher education for students from all backgrounds. The University also led the Big Ten Academic Alliance Cluster studying student retention and persistence, including failing or withdrawn course completions (commonly known as DFWs). Studying DFW rates of foundational courses will help UIUC identify barriers faced by students and determine additional support services needed for student success. Additionally, in spring 2023, the University participated in a project called the Inclusive Course Redesign Initiative. This program invited faculty to work in partnership with the Center for Innovation in Teaching and Learning (CITL) to consider course redesigns with equity and inclusion. CITL helps instructors create more inclusive courses fostering the success of all learners.

Additionally, within the Grainger College of Engineering, programs such as the Morrill Engineering Program (MEP), Women in Engineering, and the Academic Redshirt in Science and Engineering (ARISE) 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 through peer mentoring, community building, proactive advising, and academic support. Each program offers opportunities for students to experience the onset of their adjustment to the University with others from similar backgrounds. MEP engages firstyear 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. The Department of Materials Science and Engineering actively monitors the progress of students throughout the semester and proactively reaches out to students who are struggling. This effort is led by the chief advisor of the department who will partner with the associate head of undergraduate programs to appropriately act on concerns. Grainger College of Engineering also features an embedded mental health counselor. These broad and multi-layered approaches help ensure that all students are supported administratively, academically, and emotionally which contributes to the overall wellbeing of students and their progress toward degree completion.

The UI System and UIUC support the efforts of A Thriving Illinois Equity Strategy 3 to increase and retain faculty, staff, and administrators of color. The Distinguished Faculty Recruitment Program has a stated goal of increasing underrepresented minority faculty. Since 2017, the System has committed \$20 million to this program for the recruitment of new, tenured, or rising faculty from a range of disciplines who can transform the University through exceptional scholarship and teaching. A criterion of this award is that the selected faculty members will enhance diversity in the unit and in the College. Even though 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. Such examples are the Targets of Opportunity Program (TOP) and the Dual Career Academic Couples (DCAC) program. TOP provides recurring funds for salary support for hires that enhance campus diversity in STEM fields and the DCAC program provides recurring matching funding if the partner is hired into a tenure track position. These funds from the Provost's Office actively support diversity hiring and retention.

The UI System and UIUC are committed to implementing strategies from the Access 2030 Strategic Plan which aligns with IBHE's 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. Annually, the University provides over \$519 million in financial aid funding to undergraduate students, funding \$203 million by the institution, with 72 percent of students receiving some type of aid. UIUC has developed programs and initiatives to increase college accessibility and affordability for students. The Illinois Promise program covers tuition, campus fees, housing, and books for Illinois residents whose family income is at or below the federal poverty level. The Illinois Commitment program combines federal, state, and institutional grants to cover tuition and campus fees for students who are Illinois residents and have an annual family income of \$67,100 or less. The program covers tuition and campus fees for new freshmen for up to four years, eight semesters of continuous enrollment, and tuition and campus fees for up to three years and six semesters of continuous enrollment for new transfer students. The Chancellor's Access Grant provides \$5,000 in stackable grants for historically underrepresented Illinois residents to use with other awards. The University also offers scholarships to high achieving, newly admitted freshmen from historically underrepresented groups through the President's Award Program (PAP). The goal of the program is to ensure and enrich the diversity of the student body. To be eligible for consideration, students must be Illinois residents and have demonstrated outstanding academic achievement. The President's Award Program and PAP Honors have provided financial support for historically underrepresented students in the UI System. PAP awards range from \$5,000 to \$10,000 per year for four years. Additionally, UIUC participates in the AIM HIGH Grant program which provides merit-based financial assistance to students who qualify.

The Grainger College of Engineering and Department of Materials Science and Engineering have additional scholarship incentives especially for incoming, first-year students. Funds are provided by donors for this targeted purpose to help recruit the best and brightest students nationally. In this targeted group, the College and department have traditionally used additional funds to incentivize the recruitment of women, historically underrepresented, and first-generation students, making higher education more affordable while keeping a focus on equity.

The proposed BS in MatSE + DS program 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). 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.

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 Materials Science and Engineering + Data Science since there are currently no comparable undergraduate programs in the state. The BS in MatSE + DS is an innovative and distinctive program poised to position graduates to meet evolving workforce needs by incorporating a data science degree program with material sciences and engineering.

### **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 Materials Science and Engineering + Data Science program must meet the general admission requirements of the University and the



Grainger College of Engineering. Requirements will be similar to those of the established Bachelor of Science in Materials Science and Engineering program. The admission process includes a review of an applicant's extracurricular activities, related experiences, and optional test scores, if provided. The Office of Undergraduate Admissions evaluates the strength of the applicant's academic record and recommends applicants take the most challenging academic coursework available. However, the minimum general first-year academic admission requirements include:

- English: Four years
- Math: At least three to three and a half years
- Social Sciences: Two years
- Lab Sciences: Two years
- Language other than English: Two years
- Flexible academic units: Two years

Inter-college transfer students' requirements for UIUC include applicants participating in the Engineering Undeclared Program, then they may be reviewed for transfer into the BS in MatSE + DS program. Students will need to demonstrate an interest in the major by earning grades of at least a B or better in introductory courses such as CHEM 102, 103, 104, and 105; MATH 221 and 231; PHYS 211; and CS 101, while maintaining a cumulative and specialized GPA of at least a 3.0 or higher.

Off-campus transfer students will follow the guidelines and application processes for Grainger College of Engineering for the BS in MatSE + DS program. Non-UIUC students must apply and be admitted directly into the College at the time of transfer. The minimum GPA is a 3.0 on a 4.0 scale. All required technical course transfer work for the program must be completed with a grade of a B or better before applying. Applicants must also complete the prerequisite coursework in appropriate terms while taking at least 15 or more credit hours in each semester. The minimum academic coursework for off-campus students includes:

- CHEM 102 and CHEM 103, General Chemistry I and General Chemistry Lab I
- CHEM 104 and CHEM 105, General Chemistry II and General Chemistry Lab II
- CS 101, Intro Computing: Engineering & Science or CS 124, Intro to Computer Science I
- MATH 220, Calculus or MATH 221, Calculus I
- MATH 231, Calculus II
- MATH 241, Calculus III
- PHYS 211, University Physics: Mechanics
- PHYS 212, University Physics: Electricity & Magnetism

# Curriculum

The proposed BS in MatSE + DS curriculum provides an understanding of the underlying principles of synthesis and processing of materials, including the interrelationships between structure, properties, and processing. The program is designed for students to learn a breadth of knowledge in materials science, engineering, and data science to create advanced materials and



systems for the ever-changing needs of society. The proposed Bachelor of Science in Materials Science and Engineering + Data Science is a 128-credit hour program which requires the traditional core sequence in materials science and engineering curriculum with additional data science coursework requirements and a materials science and engineering practicum. Majorspecific coursework is comprised of three components:

- Data science coursework (29 hours)
- Materials Science and Engineering coursework (69 hours)
- Design experience for Materials Science and Engineering courses, MSE 494 and 495, a meaningful research and discovery experience (three hours)

In addition to the 101 credit hours above, all students must complete the University's general education requirements, and any electives needed to reach the 128-credit hour degree requirement. The proposed program aligns with the requirements of the Accreditation Board of Engineering and Technology (ABET). This innovative, interdisciplinary program will equip students with an increasingly in-demand skill set for the workforce or to meet graduate program qualifications. 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 workforce landscape.

### Assessment of Student Learning

As part of the ABET accredited assessment process, the Department of Materials Science and Engineering collects data in alternating years on student achievement, which is reviewed by the curriculum committee, and provides feedback to faculty. Course and student outcomes are directly and quantitatively measured in courses. Faculty in each course will identify problem sets, exam questions and other assignments that relate meaningfully to student learning outcomes. For the data science specific outcomes, the curriculum committee will collaborate with instructors in the corresponding CS, STAT, and IS courses to collect assessment information about MatSE + DS students. The level of mastery is determined by each instructor and generally require levels of mastery at 75 percent or higher. Adjustments and changes to lectures, problem sets, course projects and course emphasis are based on student performance on specific outcomes.

Overall, each student must maintain a minimum 2.0 GPA to graduate and at least a 2.0 GPA each semester to remain in good academic standing. If students do not meet the minimum GPA standard for two consecutive semesters, they may be dismissed from the program. Students may face academic dismissal if they do not earn at least a 1.0 GPA in any given semester. The chief academic advisor in the Department of Materials Science and Engineering will monitor students' academic performance and notify, engage, and support those who are on academic probation. The associate head of undergraduate programs, with the curriculum subcommittee, will review course outcome satisfaction result metrics to ensure satisfactory performance and will follow up if goals are not met.

#### **Program Assessment**

The proposed program will continue the established assessment standards and processes of the Department of Materials Science and Engineering. Quantitative assessments, based on student outcomes and learning objectives, are performed once per academic year in each of the core



engineering courses to identify areas for program improvement. 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, while the Grainger College of Engineering will deliver the materials science and engineering courses. The majority of classes are scheduled in classrooms located on or near the Bardeen Quad which is located between Engineering Hall and the Grainger Engineering Library. Classroom spaces for active learning are also available in the Campus Instructional Facility and the Illinois Flexible Learning Experience classrooms which help facilitate innovative technology and teaching approaches. The Department of Materials Science and Engineering currently has dedicated laboratory space in the Kiln House and the Ceramics Building that can adequately manage the proposed increase in projected enrollment.

Current library collections, resources, and services are sufficient to support the proposed program. There is no fiscal impact on the University Library for the creation and sustainability of the BS in MatSE + DS program. The University possesses appropriate library resources with access to online databases, books, journal holdings, and other electronic resources to support instruction 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 proposed program. A formal faculty evaluation process is in place. The data science courses of the BS in MatSE + DS program will be supported by several departments including Computer Science in Grainger College of Engineering, Mathematics and Statistics in the College of Liberal Arts and Sciences, and Information Sciences in the School of Information Sciences. The MatSE coursework will be provided by the Materials Science and Engineering department.

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 provide 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.

### **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 will not request 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. The additional modest increase in load will mainly be addressed by the advising staff. The Grainger College of Engineering Undergraduate Programs Office and the Engineering Career Services Office will be able to properly accommodate the planned increase in students for advisement and placement.

### 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 Department of Materials Science and Engineering at UIUC will seek accreditation ABET accreditation for the proposed BS in MatSE + DS program under the materials engineering category. ABET accreditation will provide assurance that the MatSE core of the program aligns with quality standards for graduates entering the workforce.



### **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 Materials Science and 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.

