Item #1c
December 8, 2009

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

Submitted for: Action.

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

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

Governors State University
- Doctor of Education (Ed.D.) in Counselor Education and Supervision in the South Metropolitan Region

Illinois State University
- Master of Chemistry Education (MCE) in the Central Region

Northern Illinois University
- Doctor of Physical Therapy (DPT) in the Fox Valley Region

University of Illinois at Chicago
- Master of Arts (M.A.) in Design Criticism in the Chicago Region

University of Illinois at Urbana-Champaign
- Master of Science (M.S.) in Financial Engineering in the Prairie Region

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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 is responsible for approving new on-campus and off-campus units of instruction, organized research, and public service, and units of administration proposed by public university governing boards. The Board's approval criteria, defined in rules adopted for administering the statute, address 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 the *Illinois Public Agenda for College and Career Success*, which sets forth new priorities to guide Illinois higher education in the first decade of the new millennium. Staff recommendations are based on analyses of application materials and responses to staff questions, and, for advanced degree programs, recommendations of external consultants.

Governors State University

Proposed Program Title: Doctor of Education (Ed.D.) in Counselor Education and Supervision in the South Metropolitan Region

> *Projected Enrollments*: Governors State University has projected that enrollments in the proposed Doctor of Education (Ed.D.) in Counselor Education and Supervision program will grow from 12 majors in the first year to 36 majors in the fifth year. It is estimated that 12 degrees will be awarded annually in the third year and beyond.

Background

Governors State University (GSU or University) requests authority to offer the Doctor of Education (Ed.D.) in Counselor Education and Supervision program in its home region, the South Metropolitan Region. The program is based on a practitioner-scholar model, and it is designed to produce advanced clinicians, supervisors, competent researchers, and educators with significant supervised experience in counseling, supervision, and teaching at the university level. The program has three sequences focusing in community, marriage and family, and school systems. The program will build upon the University's successful Master of Arts (M.A.) in Counseling, which has existed for over 20 years, and which enrolled 151 students in Fall semester of 2008. The Master's program is accredited by the Council for Accreditation for Counseling and Related Educational Programs (CACREP). It is indicated in the proposal that the CACREP site visitors documented in their report that the Master's program is one of the premiere training programs for counseling.

The expertise and training of individuals at the doctoral level affords graduates of the proposed program and similar programs more diverse career opportunities and also increases their earning potential. For example, graduates interested in teaching in tenure-track positions in counselor education and supervision will, beginning in 2011, be required to have earned a doctorate in a CACREP accredited program.

Need

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

The Ed.D. in Counselor Education and Supervision program is created to meet needs of students, mental health agencies, schools, and universities in the service areas of GSU. The proposal indicates that there will be a strong student demand for the program, with estimated Fall enrollments of 36 students in the fifth year of operation. Some of the students will be graduates of the University's M.A. in Counseling program, which had 151 students in 2008. The State of Illinois' Occupational Employment Projections made by the Illinois Department of Employment Security (IDES) indicates that, between 2004 and 2014, employment in related occupations will grow by over 17 percent. Projections for Cook County indicated that the need for counselors will increase by about 20 percent during the same period. A survey of students enrolled in the University's M.A. in Counseling program found that 50 students expressed interest in seeking admission to the proposed program. In addition, it is reported that faculty from Chicago State University (CSU) have inquired about the possibility of creating a partnership between its M.A. in Counseling program and the proposed doctoral program. Furthermore, the proposal indicates that there are approximately 300 postings for counseling positions to serve as directors of mental health centers, university counseling centers, and various other agencies. Establishment of the Ed.D. in Counselor Education and Supervision program would improve partnerships with such agencies and organizations within the University's service region, while forming and strengthening students as they seek internship training and future employment from such places.

The U.S. Department of Labor (DOL) stated in 2006 that employment of psychologists and counselor educators is expected to grow faster than the average for all occupations through 2014 because of increased demand for psychological and educational services in schools, hospitals, social service agencies, mental health centers, substance abuse treatment clinics, counseling firms, and private companies.

Comparable Programs in Illinois

The University has identified 49 CACREP accredited doctoral programs in Counselor Education and Supervision in the United States, including two doctoral programs in Illinois, which are offered by Northern Illinois University (NIU) and Southern Illinois University Carbondale (SIUC).

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 University's proposed Ed.D. in Counselor Education and Supervision program is based on the practitioner-scholar model with a strong service-oriented focus and emphases on the individual, couple, family, community, educational and societal systems, as well as strong advocacy skills for clients. It is expected that when approved, the University's program would be the third doctoral program in the field in Illinois with approval of the specialized accreditation. In addition, the program emphasizes scholarly writing for the purposes of ensuring that graduates acquire a high degree of professional publishing and grant writing skills. Consistent with the objectives of the specialized accreditation in the discipline, the purpose of the program is to produce advanced clinicians, supervisors, competent researchers, and educators. In addition, a significant strength of the program will be its experiential components in which all its graduates will have had direct supervised experience in counseling, supervision of staff, and teaching at the university level. It is expected that graduates of the program will provide leadership and expert services that enhance diverse student development in the school, family, community, and cultural contexts that will advance accountability of counseling services, because the faculty will be diverse in cultural and ethnic backgrounds, and will hold professional certification and licensure. The mission of the program is supportive and congruent with the goals and mission of the University.

Specific learning objectives of the program are targeted beyond the entry-level in counselor education and supervision, and they focus on many areas, including:

- theories of the principles and practices of counseling, career development, group work, systems, and consultation;
- theories and practices of counselor supervision;
- competencies required to teach in higher education;
- pedagogy relevant to current social and cultural issues, including social change theory and advocacy action training;
- design and implementation of both qualitative and quantitative research methodologies, including grounded theory, ethnographic methods, phenomenological methods, as well as univariate, multivariate, and single-subject research designs;
- models and methods of assessment and use of data;
- ethical and legal considerations in counselor education and supervision; and
- knowledge and sensitivity to diversity issues and problems involving many groups such as race, ethnicity and cultural heritage, socioeconomic status, age, gender, sexual orientation, religion, physical and mental status, and equity issues.

Additionally, it is expected that doctoral students will acquire experiences designed to 1) develop an area of professional counseling expertise; 2) develop collaborative relationships with program faculty in teaching, supervision, research, professional writing, and service to the profession and the public; 3) foster participation in professional counseling organizations, including the Association for Counselor Education and Supervision (ACES) and the American Counseling Association (ACA); 4) meet criteria for appropriate credentials; 5) promote scholarly counseling research; and 6) enhance technical competence.

Curriculum and Assessment

1050.30(b)(1): A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives, and appropriate academic record keeping.

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

Full admission to the Ed.D. in Counselor Education and Supervision program includes: completion of a M.A. in Counseling degree from preferably a CACREP accredited program, or a closely related field, and a minimum of a 3.0 grade point average (GPA) out of 4.0; completion of the prerequisite COUN 960: Advanced Practicum course; meeting the following Graduate Record Examination (GRE) requirements of 1000 on the combined verbal and quantitative score and a 4.0 in the analytical writing section; submitting a statement describing applicants' goals for seeking the degree, along with a vita or resume summarizing pertinent education and employment goals; and submitting three letters of recommendation from professionals who hold doctorates in counseling or related fields.

Curriculum

The curriculum for the proposed Ed.D. in Counselor Education and Supervision program consists of at least 48 semester hours beyond the Master's degree in eight groups comprising 12 hours in Professional Identity, Roles and Ethics; six hours in Practicum; three hours in Human Development and Biological Bases of Behavior; three hours in Appraisal; nine hours in Research; six hours in Internship; nine hours in Capstone Research Project; and six hours in approved elective courses. Forty-two semester hours of the 48 hours are required core courses every graduate in the program must complete.

The 14 required courses for the program include: Professional Identity in Counselor Education and Supervision, Advanced Counseling Theory, Supervision, Advanced Counseling Skills Practicum I and II, Advanced Human Development, Individual Assessment, Advanced Statistics, Advanced Research Seminar, Research Literature in Counseling and Psychotherapy, Internship I and II, and Capstone Project.

The curriculum for the program was designed to meet all requirements of the CACREP, including the program's courses, practica, internship, mission and objectives, faculty/student ratios, and faculty qualifications, among others. Upon approval of the program by the Illinois Board of Higher Education (IBHE), the program will begin preparing a self-study report for initial accreditation of the program. The program faculty is quite familiar with the accreditation requirements because the University's existing M.A. in Counseling program was re-accredited in 2005, and the Division Chair for the program has served as a site-team member of the CACREP for three schools and has successfully coordinated the last CACREP self-study for GSU's Master's program.

The Capstone Project, a key component of this program, is accepted by the CACREP as a substitute for the traditional dissertation. Completion of the project involves a research project, or an extensive application of professional literature to a clinical issue or topic, consistent with the evidence-based practice emphasized in the doctoral program. This requirement, in addition to the practica and internship, meets the selected practitioner-scholar model that integrates research and significant professional practice and experiences that traditional quantitative or qualitative research would not accomplish.

The structure of the program has ten sections, including requirements for continuous enrollment, time limit for the degree, restriction on the number of credits transferred, candidacy for the degree, teaching experience, practica and internship, completion of approved capstone project, and a comprehensive exam and oral defense. Examples of requirements for components of the program structure are:

- a minimum of 600 hours of supervised, doctoral-level counseling practica and internship;
- supervised experience in teaching undergraduate and graduate level courses at the University;
- successful completion of a written comprehensive examination and an oral defense before a faculty committee prior to conference of candidacy for the degree;
- a maximum of seven years to complete the degree after admission to the program;
- conference of candidacy when all coursework is completed and the student has passed the comprehensive exam and oral defense; and
- completion of a capstone project consisting of a qualitative or quantitative investigation of an approved topic in counselor education and supervision that may involve a research project, an in-depth case study, program evaluation, or an extensive literature review. The project must be presented and successfully defended before the doctoral committee of four tenured/tenure track faculty members, including three from the Counselor Education and Supervision program. The project must be consistent with the doctoral degree requirements of the University and must meet the standards of the American Counseling Association (ACA) and the American Psychological Association (APA).

Assessment of Student Learning Outcomes

Assessment of student learning outcomes in the program will be accomplished using many direct and indirect measures, with many of them focusing on the ability to demonstrate many competencies including:

- knowledge and application of advanced multiple quantitative and qualitative research designs and methods;
- knowledge and application of assessment and program evaluation models and methods;
- ability to write a high quality grant proposal appropriate for a research project, in-depth case study, theoretical review, and program evaluation;
- knowledge and skills as clinicians related to counseling theories and evaluation of their strengths and weaknesses;
- ability to complete a supervised practicum for a minimum of 40 hours and a supervised internship;
- competence as a counseling supervisor;
- knowledge of leadership and advocacy; and
- knowledge of the ACA's ethical and legal considerations.

Other measures for assessing student learning in the program will include evaluation of the student's teaching in classrooms, the comprehensive exams and oral defense, the capstone project, the internship and practica, time to degree completion, as well as course grades and GPAs.

Program Assessment

The Ed.D. in Counselor Education and Supervision program will be regularly evaluated by the program faculty and others from outside the program. The evaluation will consist of many measures including student evaluation of courses taught, internship and practica evaluation, and accreditation of the program by the CACREP.

Consistent with IBHE staff requirements, the University will submit a progress report on behalf of the proposed program at the end of the third year of operation. The report will summarize key areas of accomplishments and challenges that remain to be addressed. As other degree programs at the University have done, the program faculty will participate in the University's eight-year program review process to assess the program using multiple indicators to determine its strengths and weaknesses. Factors that will be considered in the assessment include retention and graduation rates, percentage of students involved in faculty research and other projects, the level of alumni and employer satisfaction with the program, percentage of graduates employed in relevant industries and occupations, and career advancement achieved by graduates. A summary of the program review, including the program's strengths and weaknesses, as well as steps that will be taken to improve the program, will be submitted to the IBHE with summaries of other programs reviewed in the same cycle.

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 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 Division of Psychology and Counseling (the Division) has recently built a state-of-the-art counseling lab available for individual, group, couples, and child counseling for the program and other programs administered by the Division. Students in the program will have access to high quality video and audio recording materials that will allow for careful review of their clinical work. Sufficient resources will also be available to provide appropriate counseling services to the public. These resources and other existing resources at the University will be sufficient to support the program.

Library

The Division of Psychology and Counseling, which will administer the doctoral program, is assigned a reference librarian to take care of the program's existing books and journals and to order additional ones, as well as help students and faculty meet their research needs. Through the on-campus library and through electronic subscriptions, students and faculty will have access to almost 600 journals related to counseling and mental health. Examples of key journals in the disciplines that will be available include: *Journal of Counselor Education and Supervision, Journal of Counseling and Development, Journal of Marital and Family Therapy, Family Process, Journal of Multicultural Counseling and Development, Journal of Specialists in Group Work, Measurement and Evaluation in Counseling and Development, Journal of Career Development Quarterly, Counseling and Values,* and the *Journal of Humanistic Counseling Education and Development.* In addition, it is stated that there are over 2,000 books and over 150 videos related to counseling that will support the proposed program. It is expected that any additional journal or book that will be necessary for the program will be acquired.

Technology and Instructional Resources

The Center for Online Learning at the University assists professors in utilizing online platforms, such as WebCT/Blackboard, and other technologies to support on-campus courses, hybrid courses, and online courses. The University's Digital Library is an open access repository designed to be the digital repository for GSU students, faculty and staff, as well as the central repository for all of the digital content for the 2009 Higher Learning Commission (HLC) re-accreditation visit. The Center for Online Teaching and Learning (the Center) staff will work collaboratively with the faculty to achieve instructional goals. The Center offers workshops focusing on instructional design and pedagogical concerns that assist faculty in improving their teaching, both online and in the classroom. Although the University offers quite a few courses online, there is currently no plan to offer any online courses for the proposed doctoral program. The resources summarized above and other University resources should be sufficient to meet the needs of students and faculty in the proposed program by providing ample access to students in person and online.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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 proposal for the program indicates that ten faculty members with doctoral degrees will initially support the Ed.D. in Counselor Education and Supervision program. Eight of them have Ph.D.s, one has an Ed.D, and one has a doctoral degree in clinical psychology (Psy.D.). Five of the faculty members are from CACREP approved doctoral programs, and all are members of the ACA. It is also reported that two additional appropriately qualified faculty members will be hired within the first three years when the program is approved. As stated earlier, the curriculum for the program was designed to meet the requirements of the CACREP accreditation, and the credentials of the program's existing faculty were reviewed by the accreditation body. Furthermore, three sequences in the University's M.A. in Counseling program are accredited by the accreditation agency.

Faculty members of the program are very active in research and scholarship in the discipline, and they have published many journal articles, books, and book chapters. In addition, several members serve in leadership capacity on professional associations in the discipline, including on editorial boards. The above attributes indicate that the number and qualifications of the existing faculty members are sufficient to support the proposed program.

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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are needed to establish the Ed.D. in Counselor Education and Supervision program. The University has indicated that resources to support the program will grow from $14,880 in the first year to $201,600 in the fourth year. The program will be funded by a combination of reallocation of existing resources at the University and tuition revenues from students who will enroll in the program.

Accreditation and Licensure

1050.30(b)(3): 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.

1050.50 (a)(1) Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50 (a)(2)(C) Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

The proposed program was created to meet all requirements of the CACREP, including faculty number, qualifications, and curriculum. After the program is approved by the IBHE, the program faculty will begin preparing a self-study report for initial accreditation. The faculty is quite familiar with the accreditation requirements because they were responsible for the re-accreditation of the University's M.A. in Counseling program, and the Division Chair served on three site teams for the accreditation at other institutions.

Program Information

1050.30 (b)(2)(A) The information 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, and 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 as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS); 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.

Information about the University's Ed.D. in Counselor Education and Supervision program, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as University and Graduate School policies, will be published on the University's website, www.govst.edu. Comparable information about the program will be published in hard copy in the University's catalog. Similar information may be obtained from the College of Education.

Staff Conclusion. The staff concludes that the Doctor of Education in Counselor Education and Supervision program proposed by Governors State University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment.

Illinois State University

Proposed Program Title: Master of Chemistry Education (MCE) in the Central Region

Projected Enrollments: Illinois State University is projecting that enrollments in the proposed Master of Chemistry Education (MCE) program will consist of a cohort of 24 students every three years in the first five years of the program's implementation. It has estimated that 18 degrees will be awarded in the program every third year because all students in the program will be practicing school teachers who will enroll on a part-time basis.

Background

Illinois State University (ISU or University) requests authority to offer the Master of Chemistry Education (MCE) program in its home region, the Central Region. The proposed program will lead to a new professional Master's degree, which provides a high level of conceptual knowledge and skills required for professional practice.

The program is intended to meet crucial and on-going needs for highly qualified teachers of chemistry in the state and the nation. The purpose of the program is to take current science teachers who teach chemistry, but who have a weak background in chemistry, and improve both their content knowledge and pedagogical skills so that they can improve the chemistry knowledge of their students. Some of the teachers who will enroll in this program are teaching chemistry with only a small number of chemistry courses in their college education; sometimes only General and Organic Chemistry, and virtually no chemical pedagogy courses. Often, these are biology teachers and physics teachers whose school districts call on them to teach the first high school chemistry course. Increasing the discipline knowledge of teachers and providing them with the pedagogical tools for effective presentation of chemistry concepts is a direct approach to improving classroom outcomes of high school chemistry students. Furthermore, this program has a strong potential to increase both the quantity and quality of students continuing to study chemistry beyond high school.

The University is in an excellent position to meet the need for highly qualified teachers of chemistry through the implementation of the proposed program, which is specifically aimed at improving the chemistry content and chemistry pedagogy of in-service chemistry teachers.

Need

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

The field of chemistry education is an essential component of the scientific and technological development of students across the state and the nation. The proposed MCE program is another way in which the University can improve the teaching of chemistry in the P-20 spectrum. The method of delivering most courses for the program will be via the Internet in order to make the program accessible to a large number of the state's chemistry teachers and other science teachers.

Increasing the knowledge and skills of mathematics and science teachers in their fields of specializations is a priority identified in studies and reports from the National Science Foundation (NSF), the U.S. Department of Education, the Illinois State Board of Education (ISBE), and the Illinois Board of Higher Education (IBHE), among others. To increase the number of students who complete degree programs for teacher educators in mathematics and sciences, the University applied for, and was awarded, a No Child Left Behind federal grant to establish the proposed program. This establishment was accomplished with the collaboration of ISBE and IBHE staff members.

Two-thirds of the nation's K-12 teachers are expected to retire or leave the profession over the coming decade. According to the National Commission on Mathematics and Science Teaching for the 21st Century Report of 2000, to fill the projected vacancies, there will be a need to hire over 200,000 middle and high school mathematics and science teachers. In its *American Competitiveness Initiative*, the Office of Science and Technology Policy (OSTP) indicated in 2006 that by 2015, there will be a need to employ 100,000 highly qualified teachers. In addition, the 2004 data from the National Center for Education Statistics (NCES) show that students in high-poverty schools are more likely to be taught science and mathematics by teachers who did not complete a major or minor in the subject they teach. Furthermore, Goldhaber and Brewer of the National Research Council (NRC) reported in their article "Evaluating the Effect of Teacher Degree Level on Educational Performance" that teacher's content knowledge, particularly in science and mathematics, is an important factor in determining student achievement.

If approved by the IBHE, this program will contribute positively to addressing the documented need for highly qualified teachers of chemistry with a Master's degree in the field.

Comparable Programs in Illinois

Currently, there are two similar programs offered in Illinois by Southern Illinois University at Edwardsville (SIUE) and the University of Illinois at Urbana-Champaign (UIUC). However, neither of these programs includes a distinct combination of graduate coursework in chemistry, chemistry education, and science education with the classroom based Action Research, all delivered via distance education.

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 mission and goals of the MCE program are to recruit current science teachers who teach chemistry, but who have a weak background in chemistry, and improve their content knowledge and pedagogical skills significantly so that they can improve the chemistry knowledge of their students to a much higher level. At the completion of the program, graduates would have acquired knowledge, skills, values, disposition, and commitment necessary to improve their chemistry instruction, to help other fellow chemistry teachers improve their chemistry instruction, and to assume mid-level chemistry education leadership positions. The mission of this program is consistent and supportive of the mission of the College of Education and the University.

Specific objectives of the proposed program for students admitted to the program are to:

- be conversant with the historical, philosophical, organizational, and current research issues in chemistry and science education;
- master and interpret current chemistry knowledge appropriate for the secondary school classroom;
- be committed to the continual education, growth, and understanding of all chemistry students;
- facilitate the success of other chemistry teachers through effective development and implementation of professional development opportunities for others;
- work successfully in chemistry teaching and leadership settings in secondary schools;

- develop and successfully complete a series of Action Research projects aimed at identifying strengths and weaknesses in classroom instruction and process of continual improvement; and
- assess, evaluate, and improve chemistry education in secondary schools.

Each of the objectives above will be achieved through one or more required courses for the program.

Curriculum and Assessment

1050.30(b)(1): A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives, and appropriate academic record keeping.

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

To be admitted to the MCE program, an applicant must 1) have at least a 2.8 grade point average (GPA) on a 4.0 scale for the last 60 hours of undergraduate work; and 2) hold or be eligible for a valid certificate to teach science or mathematics. An international student applicant must obtain a Test of English as a Second Language (TOEFL) score of 600 (250 for the computer-based testing).

Curriculum

The curriculum of the proposed program consists of at least 33 semester hours of coursework in four areas: Chemistry Content, Chemistry Education, Foundational Science Education, and Action Research. Another requirement is that the student will continue to take the capstone classroom Action Research project course. The chemistry content consists of nine hours from courses such as Analytical Chemistry, General Biochemistry, Inorganic Chemistry, Topics in Contemporary Chemistry, and Topics in Inorganic Chemistry. The Chemistry Education component consists of nine hours from Advanced Chemistry: Curriculum & Pedagogy, Leadership in Chemistry Education, and Developing Practices in Chemistry Education. The Science Education component comprises nine semester hours from three of the four following courses: Instructional Media and Technology, Curriculum in Science Education, Recent Research in Science Education, and Instructional Strategies for School Science. The Action Research component has six credits from Professional Research I and II. Courses are to be taken sequentially with a purposeful, prescribed progression through the program. Each course builds on prerequisite classes with foundational courses taken first, to provide knowledge, skills, and abilities necessary for success. The prerequisites listed for courses in the catalog explain and support the concept that knowledge and learning in this degree program will be cumulative.

A thesis is not a requirement for this program. The six semester hour Action Research component is a substitute for the thesis requirements. Essential attributes of the Action Research project are:

Capstone Action Research Project

The capstone course will focus on the rationale, issues, and implications of the current teacher research movement within education and on the research strategies and techniques that can be used by teachers in conducting research in their own classroom settings. The current teacher research movement is recognizing that teachers can be researchers in their own classroom settings, both to add to their own understandings about teaching and learning, and to contribute to the broader field of education. This course is a synthesizing experience, bringing together all that is learned from previous coursework and the Action Research project.

The course will discuss the theoretical foundation of teacher research, *i.e.*, why teacher research is important to teachers and to the broader field of education. It will also explore various research strategies used in qualitative and ethnographic research, but with specific focus on the issues and adaptations involved when teachers in their own classrooms use these strategies. Issues of data collection, data analysis, research design, and presenting findings both orally and in writing will be addressed.

This capstone course is designed as a collaborative, critical examination of students' research. The class depends on students' joint willingness to read and discuss, ask questions, try out research strategies, and critically analyze research methodologies. The instructor's goal is that the participants in this seminar become part of a strong working community, which supports both group and individual goals. Evaluation of each student's report will be based on many factors, including the literature review, research questions, the Research Action Plan, input from the Institutional Review Board, and completion of the report and presentation.

Assessment of Student Learning Outcomes

Assessment of student learning outcomes in the proposed program will be accomplished to determine if each student has mastered both the theoretical and practical knowledge and skills necessary to be an effective chemistry teacher. This will be measured by:

- pre-and post-test assessment to determine if the student has learned and can interpret current chemistry knowledge appropriate for the secondary chemistry classroom;
- alumni surveys administered one and five years after graduation;
- monitoring student grades and GPAs, retention rates, and time-to-degree completion;
- evaluating the quality of students' Action Research projects;
- monitoring the success rates of graduates on certification examinations;
- conducting surveys of employers of alumni to determine graduate success in the profession; and
- monitoring the results of student evaluation of courses for the program.

Program Assessment

The MCE program will be regularly evaluated by the program faculty and others from outside the program. The evaluation will consist of many measures, including student evaluation of courses taught, the ability of the Department, including this program to maintain the existing accreditation and be reaccredited by the American Chemical Society's Committee on Professional Training (CPT).

Consistent with IBHE staff requirements, the University will submit a progress report on behalf of the proposed program at the end of the third year of operation. The report will summarize key areas of accomplishment and challenges that remain to be addressed. As other degree programs at the University have done, the program faculty will participate in the University's eight-year program review process to assess the program using multiple indicators to determine its strengths and weaknesses. Factors that will be considered in the assessment include retention and graduation rates, percentage of students involved in faculty research and other projects, the level of alumni and employer satisfaction with the program, percentage of graduates employed in chemistry education, and career advancement achieved by graduates. A summary of the program review, including the program's strengths and weaknesses, as well as steps that will be taken to improve the program, will be submitted to the IBHE with summaries of other programs reviewed in the same cycle.

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 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.

No new facility is needed for the proposed program because the program will use the recently renovated Julian Hall and the Science Laboratory Building housing the Chemistry Department (the Department). It is expected that the needs of students in the proposed MCE program will be fully met by the Department or the College.

Library

The University's Milner Library (the Library) has extensive holdings, including books, and text and e-journals to support the chemistry content, chemistry education, and curriculum and instruction courses for the proposed MCE program. The Library subscribes to several important research databases and recourses, notably Scifinder, MedLine, Cambridge Structural Database (CSD), the online CRC Handbook of Physics and Chemistry, and Perry's Handbook. The Library subscribes to 121 chemistry journals either in print, print/online, or online only. As the chemistry periodical holdings gradually shift from print to electronic holdings, students and faculty gain increasingly convenient and rapid access to a heavily used resource. This is particularly important for students registered in online chemistry courses. Although constantly under budget pressure, the Library has worked to enhance collections that support students in chemistry and science teacher education programs. Should a need for additional library resources arise in the future, it will be met by the Department, College, or University.

Technology and Instructional Resources

Instructors interacting with students in the program via distance education will use the facilities of the Chemistry Department, along with the Curriculum and Instruction Departments, as well as the facilities of the Classroom Technology Support Services (CTSS). CTSS maintains a full video conferencing service for faculty and staff at the University using IP Videos for video conferencing and distance education applications.

No additional computer resources are needed for the proposed degree program because recapitalization of faculty computers is current through 2005-vintage systems. That is, no faculty members have computers that are more than four years old, and the Department expects to maintain them in good condition. In addition, all computers in the primary computer lab for students in the Science Laboratory Building have been replaced as of June 2009, and it is expected that up-to-date computing equipment will be available to students in all degree programs for the foreseeable future.

The University employs full-time local area network administrators, who provide technical support to faculty teaching web-assisted and distance education courses. Several offices on the University's campus provide support for faculty developing and teaching distance education courses. For example, the Center for Teaching and Learning Technology (CTLT) provides instructional technical assistance to faculty in the use of technology for instruction, research, and other professional activities. The programs offered by CTLT include distance education training programs, computer short courses, and web-based training courses.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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.

Currently one full-time faculty member in the Chemistry Department (the Department) coordinates all chemistry teacher education programs at the University and teaches three of the required courses. In addition, 19 other faculty members in the Department are available to teach the rest of the required chemistry content courses for the proposed program as part of their assigned instructional workload.

The Department currently supports three on-going part-time academic advisors for undergraduate and graduate programs. The Department also has three full-time support staff that work with admission applications, program administration, and notification, along with related correspondence between chemistry graduate students in other chemistry programs. These staff members will be available to support the proposed program.

Qualification requirements to teach courses for the proposed program include a terminal degree in an appropriate field, ability to support the mission of the Department and College, and the ability to teach effectively and conduct scholarly work. Faculty members are evaluated annually regarding the quality of their performance in teaching, research, and service. Allocation of salary raises is based on their performance, along with consideration of equity.

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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are needed to establish the MCE program. The budget for the proposed program is projected to be $75,200 in each of the first three years. Total cost in the fourth year is estimated at $67,700, and it will be met by reallocating existing resources which will include tuition paid by students admitted to the proposed program. The $75,200 cost for the program in each of the first three years will be met by the U.S. Department of Education grant funds awarded through ISBE from a total grant award of $1 million. Some of the grant funds will support the development of new courses for the proposed program. These funds should be sufficient to support the proposed program.

Accreditation and Licensure

1050.30(b)(3): 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.

1050.50 (a)(1) Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50 (a)(2)(C) Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

The Department of Chemistry, which will administer the proposed program, is accredited by the American Chemical Society. It is expected that the MCE program will be included among the Department's programs currently accredited.

Students enrolled in this program would already have a Type 09 6-12 certificate in Illinois with an endorsement in "Science" and a designation in physics, chemistry, biology, or earth science. Teachers receiving this degree could take the ISBE content exam and add the "Chemistry" designation to the other designations they already have. It is probable that teachers enrolled in the proposed program would most likely already have the chemistry designation.

Program Information

1050.30 (b)(2)(A) The information 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, and 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 as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS); 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.

Information about the University's MCE program, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as University and Graduate School policies, will be published on the University's website, www.ilstu.edu. Comparable information about the program will be published in hard copy in the University's graduate catalog. Similar information may be obtained from the College of Education or the Graduate School.

Staff Conclusion. The staff concludes that the Master of Chemistry Education program proposed by Illinois State University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment.

Northern Illinois University

Proposed Program Title: Doctor of Physical Therapy (DPT) in the Fox Valley Region

Projected Enrollments: Northern Illinois University has projected that enrollments in the proposed Doctor of Physical Therapy (DPT) program will grow from 36 students in the first year to 108 students in the fifth year. It is estimated that approximately 36 degrees will be awarded annually in the third year and beyond.

Background

Northern Illinois University (NIU or University) requests authority to offer the Doctor of Physical Therapy (DPT) program in its home region, the Fox Valley Region. The University currently offers a Master of Physical Therapy (MPT) program, which enrolled 30 students in Fall 2008 and also awarded 30 degrees in fiscal year 2008. The Physical Therapy program at the University was initiated in 1980 with a bachelor's degree, and the first class graduated in 1982. In 1999, the program transitioned to the MPT, and the program graduated its first class in 2002. As other MPT programs in the state made the transition to the doctoral program, consistent with trends in the discipline, the University decided to develop the proposed program in order to remain current and competitive, and also to attract highly qualified applicants. When the DPT program is approved by the IBHE, the existing MPT program will be phased out. Curriculum for the program was developed through a review of current best practices, the American Physical Therapy Association (APTA) standards, feedback from clinicians, the program's objectives, and other sources. This transition will help meet the physical therapy needs in the northern region and the state, and the program will be consistent with the APTA's vision that by 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy, recognized by consumers and other healthcare professionals as the practitioners of choice to whom consumers have direct access for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.

Significant occupational demand for physical therapists is documented by the Illinois Department of Employment Security (IDES) for the 2004 to 2014 period and also the *Occupational Outlook Handbook*, 2008-2009 Edition.

Need

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

The IDES staff has projected a significant growing need for physical therapists. Employment projections for physical therapists in Illinois for 2006 to 2016 are expected to increase by 40 percent from 6,884 to 9,661 positions. Each year there are approximately 260 job openings for physical therapists in the northeastern Illinois region alone. The seven professional physical therapy programs in Illinois public and private institutions produced an average of only 209 graduates per year from 2005 to 2007. The majority (90 percent) of graduates of NIU's current MPT program remains in the state, and they initiate their physical therapy practice in the state. It is anticipated that a significant portion of graduates of the proposed program also will remain in the state after graduation.

Significant occupational demand for physical therapists in Illinois was also documented in the 2004 Illinois Workforce Investment Board's (IWIB) report, *Healthcare Task Force Report: Findings and Recommendations.* The report indicates that occupational demand for physical therapists in the state is second only to the demand for registered nurses and licensed practical nurses. Data for the report were from the IDES, along with survey results from local workforce boards throughout Illinois.

According to the *Occupational Outlook Handbook* 2008-2009 Edition, employment of physical therapists is expected to grow by 27 percent in the United States from 2006 to 2016. The strong demand is attributable to an increasing elderly population, which increases the number of people with disabilities, victims of accidents, and new treatments and techniques.

It is expected that when the proposed program is approved, it will be accredited by the accreditation agency in the discipline, and it will contribute significantly to addressing the documented occupational demand.

Comparable Programs in Illinois

In November 2008, the Commission on Accreditation of Physical Therapy Education (CAPTE) reported that 195 of 210 accredited physical therapy programs were offering the doctorate as the entry-level degree in the discipline. The DPT program is currently offered by the following six Illinois institutions: Bradley University, Governors State University, Northwestern University, Midwestern University, Rosalind Franklin University of Medicine and Science, and the University of Illinois Chicago. NIU is the only Illinois institution that is offering a Master's degree instead of the doctoral program in physical therapy.

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 mission of the DPT program is to help meet the healthcare needs of the northern Illinois region and the state through the preparation of well educated and skilled physical therapists who will deliver high quality services in a changing healthcare environment. The mission and objectives of the program are consistent with, and support the mission of the Department, the College of Health and Human Services, and the University.

Curriculum and Assessment

1050.30(b)(1): A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives, and appropriate academic record keeping.

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

As MPT programs are replaced by doctoral programs, students seeking admission to the DPT program must have completed baccalaureate degrees from regionally accredited colleges or universities prior to matriculation. Applicants who are physical therapists with bachelor's degrees, or who have completed a MPT degree, will not be considered for admission to this program. Applicants seeking admission to the proposed program must meet:

- admission requirements of NIU's Graduate School;
- the need for competitive scores on the Graduate Record Examination (GRE) General Test;
- a minimum grade point average (GPA) of 3.0 out of 4.0 in the last 60 semester hours of undergraduate work; and
- a minimum GPA of 3.0 in prerequisite courses in laboratory-based courses in general biology, chemistry, and physics, as well as courses in psychology, statistics, and research methods.

These admission requirements are comparable to admission requirements of other DPT programs in the state.

Curriculum

The program of study is designed to meet or exceed the minimum standards of the CAPTE and requirements for state licensure. The program is designed to provide students with the knowledge and skills required to function as entry-level physical therapy practitioners in evidence-based practice, and also to provide experience in clinical and research procedures.

The key student learning objectives of the program are for graduates to demonstrate:

- knowledge, competence, and confidence in the delivery of ethical healthcare;
- effective communication skills in a variety of professional situations;
- effective interpersonal skills;
- ability to develop creative and effective solutions to professional problems;
- an appreciation of the need for flexibility and change in all aspects of physical therapy professional endeavors; and
- ability to continue to grow as a physical therapy professional.

The curriculum for the entry-level three-year DPT program consists of 108 to 110 semester hours. Courses for the model three-year curriculum are laid out in a sequential order by year and semester from the beginning of the first year to the end of the third year. Students in the program are required to complete the same set of courses which comprise several themes, including courses in the following: 1) Foundations of Physical Therapy for 17 hours; 2) Research Methods and Application for six hours; 3) Clinical Experiences for 22 hours; 4) Evaluation and Treatment for five hours; 5) Administration and Management for 10 hours; and 6) a comprehensive examination course for one hour.

The 108 to 110 semester hour program has 35 graduate courses that cover many topics, including courses in the following: Gross Human Anatomy, Foundation of Physical Therapy, Neurological Basis of Human Movement, Clinical Experience, Psychosocial Aspects of Disability, Evaluation and Treatment, Pathology of Physical Therapists, Pharmacology for Physical Therapists, Cardiopulmonary Physical Therapy, Neurological Rehabilitation, Pediatric Physical Therapy, Practice Issues in Physical Therapy, and Physical Therapy Management: Complex Patients.

By the time a student is ready to graduate from the DPT program, each student will have demonstrated that he or she has met the requirements for the doctorate in multiple ways, including successfully:

- completing clinical requirements through the use of the Clinical Performance Instrument (CPI) used by most physical therapy education programs;
- completing all practical examinations by a score of at least 80 percent in areas such as patient examination, evaluation of findings, and the use of appropriate interventions;
- completing the Comprehensive Practical Examination, which includes a demonstration of the ability to examine and treat patients with a variety of movement-related problems;
- passing the Performance on Practice Exam and Assessment Tool (PEAT), which students typically take to help them prepare for the professional licensure examination. The examination is offered by the Federation of State Board of Physical Therapy (FSBPT); and
- developing, implementing, and completing his or her clinical research project under the supervision of the program's faculty member. The quality of the research projects of students in the program will be considered when the program applies for accreditation by the CAPTE.

Completion of a dissertation is not a requirement for the proposed program because completion of the program leads to a professional practice degree instead of a research degree. In addition, the accreditation agency does not require completion of a dissertation in this program. However, students in the program will have extensive preparation for research training through the required four research courses and the research applications they will need in order to complete their clinical research projects. It is anticipated that some students will report their research in manuscripts prepared for submission for publication in professional journals in the discipline and related fields.

Assessment of Student Learning Outcomes

Student learning outcomes for the DPT program reflect the professional knowledge and skills needed by entry-level physical therapists, and the student learning outcomes are consistent with accreditation standards in the discipline. The outcomes include the student's ability to demonstrate:

- confidence and competence in the delivery of ethical healthcare based on professionally accepted current evidence;
- effective communication skills in a variety of professional situations;
- effective interpersonal skills in a variety of professional situations;
- professional competence in several areas, including passing the practical and comprehensive examinations, passing the Practice Exam and Assessment of the

Federation of State Boards of Physical Therapy (FSBPT) in preparation for taking the licensure examination;

- ability to pass the clinical performance assessment; and
- ability to develop, implement, and successfully complete the required clinical research project.

Other assessment measures that will be used by the program include student grades in each course, GPAs, graduation rates, time-to-degree completion, and the proportion of each graduating class that pass the licensing examination.

Program Assessment

Consistent with the IBHE staff requirements, the University will submit to the IBHE staff a progress report on the DPT after it is approved by the Academic Planning Council at the end of the third year of operation. The report will summarize key areas of accomplishments and remaining challenges. In addition, the program faculty will participate in the University's eight-year program review process to assess the program using multiple measures to determine the program's strengths and weaknesses. Key factors that will be used in the assessment of this program include evaluation of faculty teaching in the program, faculty research, grants, and contracts, as well as scholarship, awards and honors, retention and graduation rates of students, the level of alumni and employer satisfaction with the program, and the percent of graduates employed in physical therapy and closely related occupations. A summary of the program review, including the program's strengths and weaknesses, as well as steps to be taken to improve the program, will be submitted by NIU to the IBHE with summaries of other programs reviewed in the same cycle.

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 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.

In addition to facilities at the University that currently support the MPT program, there are approximately 200 contracts with clinical agencies that will provide clinical experiences for students in the proposed program. Each student will participate in two six-week and two eight-week clinical experiences during the program under the supervision of program faculty.

Library

NIU's University Libraries (the Libraries) are committed to the support of research, scholarly inquiry, and instruction of all degree programs offered by the University. With total holdings of over 2 million volumes, nearly 97,000 maps, and 25,000 print serials and periodicals, the University's library system easily ranks among the top 80 academic libraries in the nation. Through the I-Share, Illinet Online, and WorldCat Online Catalog Systems, library patrons, including students, have access to the collections and holdings of academic libraries statewide and worldwide. The Libraries provide services for all users that include instruction, mediated searches, interlibrary loan, document delivery, and electronic reserves, among others. The existing library resources, including resources for the 12 baccalaureate through doctoral level programs in the health sciences and professions at NIU, are more than adequate to meet the needs of students, faculty, and staff for the proposed doctoral program.

Electronic databases that provide access to numerous full-text journals are available via the Internet, including *Cumulative Index to Nursing and Allied Health, Medline, Health Source/Academic Edition,* and *Health Source/Consumer Edition.*

Key professional journals that will support students and faculty in the DPT program include the following 12 journals: *Annals of Long-Term Care: Clinical Care and Aging, Archives of Physical Medicine and Rehabilitation, Cardiopulmonary Physical Therapy, Experimental Brain Research, Gait and Posture, Journal of Back and Musculoskeletal Rehabilitation, Journal of Foot and Ankle Surgery, Journal of Orthopedic and Sports Physical Therapy, Journal of Prosthetics and Orthotics, Journal of Women's Health Physical Therapy, Journal of Management: The Interdisciplinary Journal of Rehabilitation,* and *Rehabilitation and Community Care Medicine.*

In addition, the proposed program will be supported by a minimum of 15 textbooks including *Functional Movement Development Across the Lifespan, Rehabilitation Research: Principles and Applications, Differential Diagnosis for Physical Therapists: Screening for Referral, Vestibular Rehabilitation, Physical Examination of the Spine and Extremities, Muscles: Testing and Function with Posture and Pain, Therapeutic Exercise Foundations and Technique, Joint Structure and Function, Orthopedic Physical Assessment, Exercise Physiology: Energy and Nutrition,* and *Human Performance.*

Technology and Instructional Resources

The proposed program is intended to replace the current MPT program. Existing resources that currently support the MPT program will support the proposed program. The University maintains 14 on-campus computer laboratories that are staffed by lab assistants, and they are open from 8:00 a.m. to 10:00 p.m. on weekdays and for shorter periods on the weekends. The University also provides all faculty, staff, and students with individual email accounts and services. All faculty offices are equipped with computers that provide access to the Internet. Blackboard is a course management system used campus-wide. All teaching faculty and currently enrolled students have access to Blackboard. The system allows faculty to post materials, deliver tests and surveys, hold online discussions, along with many other course-related functions.

The University's existing MPT degree has recently acquired state-of-the-art computerized balance evaluation and motion analysis equipment, and it is one of the few programs that have such equipment to enhance student learning. The University has a physical therapy dedicated use of a "smart" classroom and three student laboratories on campus. The laboratories are well equipped to meet the needs of as many as 36 students. These resources will be used by students, faculty, and staff in the proposed program.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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.

Five full-time tenured/tenure-track faculty members are currently allocated to support the MPT program. When the proposed program is approved, the same faculty members will be responsible for it. Four of the five faculty members hold a Ph.D. degree. Their specializations include physiology, biophysics, biomedical engineering, physical therapy, and rehabilitation sciences. Three faculty members are licensed physical therapists, two faculty members are senior members of the graduate faculty, and two are full members of the Graduate School. One faculty member is the Academic Coordinator of Clinical Education while another is the Physical Therapy Clinic supervisor. One position is currently vacant but it is expected to be filled by a physical therapist at the assistant professor level in the second year the program is implemented. In order to deliver the proposed program, faculty members will be assisted by lab assistants and graduate assistants, who will work in the clinic and skills laboratories and who will also provide students with other needed support.

The University's Constitution defines and provides for a rigorous review of tenure and promotion requests. The Constitution and Bylaw mandate an annual evaluation of all tenured and tenure-track faculty through a peer review process and an administrative review. Teaching effectiveness is monitored on an ongoing basis, and faculty teaching at the graduate level must be approved by the Graduate School based on criteria approved by the Graduate Council.

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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are requested to establish the DPT program. According to the proposal, the budget for the program is estimated to grow from $509,711 in the first year to $572,211 in the second through the fourth year. It is indicated that approximately 90 percent of the budget, or $458,911 to $521,411, for the program currently exists in the base budget to support the existing MPT program. The balance of about ten percent of the total budget, or $50,800, will come from funds that have been designated to fill the vacant faculty position in year two and beyond from internal reallocation within the College of Health and Human Sciences. The program will admit a cohort of 36 new students each year. It is expected that there will be 72 students in the second year and 108 students in the third year.

Most of the funds for the program will pay for personnel, including faculty, the Academic Coordinator of Clinical Education, the Physical Therapy Clinic supervisor, and graduate assistants. Nearly $50,000 will pay for supplies, services, and equipment each year. It is expected that the estimated budget will be sufficient to support the proposed program.

Accreditation and Licensure

1050.30(b)(3): 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.

1050.50 (a)(1) Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50 (a)(2)(C) Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

The Evaluative Criteria for Accreditation of Education Programs for the Preparation of Physical Therapist promulgated by the Commission on Accreditation in Physical Therapy Education (CAPTE) was a core document used during the development of the proposed doctoral program. The admission requirements, graduation requirements, curriculum, and faculty qualifications are all congruent with these standards. Because the University's MPT is currently accredited, the accreditation will be transferred to the proposed program once final approval is granted by the IBHE and the *General Information Form for Programs Converting to the DPT* degree is submitted to the CAPTE. Accreditation of the program would then be placed within the regular cycle of reaccreditation.

Program Information

1050.30 (b)(2)(A) The information 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, and 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 as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS); 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.

Information about the University's DPT program, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as University and Graduate School policies, will be published on the University's website, www.niu.edu. Comparable information about the program will be published in the University's Graduate Catalog. Similar information may be obtained from the Graduate School and the College of Health and Human Sciences.

Staff Conclusion. The staff concludes that the Doctor of Physical Therapy program proposed by Northern Illinois University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment.

University of Illinois at Chicago

Proposed Program Title: Master of Arts (M.A.) in Design Criticism in the Chicago Region

Projected Enrollments: The University of Illinois at Chicago has projected that enrollments in the proposed Master of Arts (M.A.) in Design Criticism program will grow from six students in the first year to 16 students in the fourth. By then, when the program reaches its full complement of students, eight degrees will be awarded in the two-year program every year.

Background

The University of Illinois at Chicago (UIC or University) requests authority to offer the Master of Arts (M.A.) in Design Criticism program in the Chicago Region. The proposed two-year program is designed for students, including postgraduate and mid-career professionals who are interested in refocusing on research, writing, and publication in areas such as architecture, urbanism, landscape, and allied design practices. In addition to those with architectural backgrounds, the program will be suitable for those from other fields who are already practicing as critics, journalists, or curators, but who want to develop expertise in the design areas; or those interested in seeking an academic career. The program does not lead to a professional degree, and it does not fulfill the requirements for the architectural licensing examination. Graduates of the program will obtain employment as writers, editors, and educators with both print and electronic media, colleges and universities, magazines, journals, and architectural firms, among others.

The University currently offers nine degree programs related to art and design: at the baccalaureate level in architecture, industrial design, graphic design, and studio arts; at the Master's level in architecture, urban planning and policy, industrial design and graphic design; and at the doctoral level in art history. The University's School of Architecture, which will administer the M.A. in Design Criticism program, first offered a Master's degree, the Master of Architecture, in 1977, a program that has gained prominence nationally and internationally and is accredited by the National Architecture Accrediting Board (NAAB). If approved by the Illinois Board of Higher Education (IBHE), the M.A. in Design Criticism program will build upon the existing nine closely related fields at the undergraduate and graduate levels.

Faculty members and students in the School of Architecture will benefit formally and informally from the extensive aggregation of cultural and educational institutions, civic enterprises, and the rich human diversity of the Chicagoland region. The city and the region offer many opportunities to faculty and students at UIC through symposia, conferences, lectures, and exhibits sponsored by institutions such as the American Institute of Architects (AIA) - Chicago, Chicago Architectural Club, School of the Art Institute of Chicago, Graham Foundation for the Advanced Study in the Fine Arts, Chicago Architecture Foundation (CAF), and the College of Architecture at the Illinois Institute of Technology (IIT), and others. Faculty and students in the proposed program will have access to the same resources.

Need

1050.30(a)(6): A) The unit of instruction, research, or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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.

Today, architecture and its corollary design fields have become increasingly focused toward academic and professional specialization. In this context, architecture and its allied design professions have become central in producing the complex environment in which we live, but increasingly unable to situate and evaluate the cultural and social significance of such developments for a wider audience. Over the years, Chicago has lost its status in the international scene because it has not sponsored a dynamic culture of discourse and criticism. The proposed M.A. in Design Criticism program seeks to fill these public and professional needs by understanding and employing criticism as a platform for new practices and future production of design. It will take advantage of existing institutional and organizational venues for public

discourse in architectural design afforded by many public and private institutions in Chicago, such as the Graham Foundation for Advanced Studies in the Fine Arts, the Arts Club of Chicago, the CAF, the Art Institute of Chicago, and the Museum of Contemporary Art.

The *Illinois Occupation Employment Projections* by the Illinois Department of Employment Security (IDES) indicate that demand for writers and editors will grow by about four percent between 2004 and 2014. During the same period, occupational demand for specialized or technical writers is estimated to increase by 18 to 20 percent in Illinois, with a concentration in the Chicago-Naperville-Joliet metropolitan area. As reported in the *Occupational Outlook Handbook* 2008-2009 Edition of the Bureau of Labor Statistics (BLS), occupational demand for writing in specialized areas for electronic and print media is projected to grow by ten percent, or about as fast as the average for all occupations from 2006 to 2016. The growing occupational demand is attributable to some extent to print magazines and periodicals that are increasingly developing market niches that appeal to readers in special interests, and making web-based content available. In addition, online publications and related services are growing in number and sophistication, spurring the demand for writers and editors, especially those with web experiences. Graduates of the proposed program are expected to meet some of the occupational demand in the state. Furthermore, graduates of the program are expected to teach at universities and colleges that have design or critical theory emphasis, including UIC, Illinois Institute of Technology (IIT), the School of the Art Institute of Chicago, the University of Chicago, Northwestern University, and the University of Illinois at Urbana-Champaign (UIUC).

Comparable Programs in Illinois

If approved, the M.A. in Design Criticism program will be unique in Illinois. The only other program in the state that is somewhat similar with the proposed program is the M.A. in Journalism program established in 2008 and offered by the School of the Art Institute of Chicago. This program is distinct from the proposed program in that it is targeted primarily at journalists in the arts, whereas UIC's program focuses more on practitioners in architecture, urbanism, and design.

Outside Illinois, seven universities offer programs that are similar to the proposed M.A. in Design Criticism program. They include Harvard University, the University of California at Los Angeles, Columbia University, Ohio State University, and Yale University.

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 M.A. in Design Criticism program is a two-year program designed to develop in its students textual and visual argumentation in the areas of architecture, urbanism, landscape, and allied design practices. The core of the program revolves around intensive writing seminars and publication workshops with the objective of developing the practice of writing in diverse fields of electronic and print media communications. The program is intended for students, including postgraduate and mid-career professionals, who are interested in refocusing on research, writing, and publication; those practicing as critics, journalists, or curators, but who want to develop expertise in the design areas considered; or those seeking a terminal degree to pursue careers in academia. Specifically, the 56 semester hour program is designed to advance the practice of writing and critical argument, research, and analysis, and to inject these insights and speculations

into the diverse media of design communication. Student progress in the program will be accelerated by being situated in the School of Architecture that focuses on contemporary design, and through the program's overlapping coursework of the Master of Architecture program, as well as the post-professional Master of Science in Architecture programs.

The goals and objectives of the proposed program are consistent with the mission of the School of Architecture and the University.

Curriculum and Assessment

1050.30(b)(1): A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives, and appropriate academic record keeping.

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

Admission to the M.A. in Design Criticism program requires:

- an earned baccalaureate degree in any field, or an accredited professional degree in architecture, or a functional equivalent;
- a minimum of 3.0 out of 4.0 grade point average (GPA) for the final 60 semester or 90 quarter hours of undergraduate study;
- a minimum Test of English as a Foreign Language (TOEFL) score of 550 paper-based, 213 computer-based, or 80 with sub scores of 19 in Reading, 17 in Listening, 20 in Speaking, and 21 in Writing in the new Internet-based TOEFL;
- submission of the General Graduate Record Examination (GRE) scores;
- three letters of recommendation, preferably from individuals acquainted with the applicant's academic, professional, or creative work;
- submission of a 500-word statement addressing a) the student's reasons for applying to the graduate program; b) current and previous accomplishments that relate to plans for the proposed program; and c) professional goals and areas of research or design inquiry that would be pursued in the proposed program; and
- submission of a written portfolio consisting of the applicant's previous experiences and creative ability.

Curriculum

The curriculum for the two-year M.A. in Design Criticism program consists of 56 semester hours of which 44 hours will be from courses at the 500 level. Twenty-four semester hours of the curriculum are from six required core courses in architecture that every student in the program must complete. These courses are: Pro-Seminar I: Design Criticism, Pro-Seminar II: Publication and Graphic Argumentation, Writing Tutorial I and II, Research Seminar, and

Architecture Theory + History III. The remaining 32 semester hours to complete the program are from elective courses approved by each student's academic adviser. These courses may be selected from the fields such as architecture, art history, art and design, among others. Examples of the elective courses are: Topics in Architectural Theory + History; Topics in Architecture, Art and Design; Topics in Modern and Contemporary Architecture; Issues in Architecture, Design, and Urbanism; Seminar in Non-Western Art and Architecture; Readings in Art and Architecture; and Advanced Topics in Interdisciplinary Arts. Academic advisers may approve courses outside the typical fields.

Currently, graduate students in the School of Architecture have access to 35 courses at the 400 and 500 levels in art history and design as electives. The projected enrollments of 16 students (over the proposed program's two year duration) are not expected to overload the 35 courses. Current specific design, history, and theory courses enroll on the average a total of 20 students, which can easily accommodate the 16 students over a two-year period.

A supervised internship is an optional requirement for the degree. It is designed to build leadership skills and field experience in writing to promote critical thinking and problem solving skills, along with the application of knowledge in a practice setting for writing about design issues. The evaluation of the internship will be carried out by faculty supervisors and, where possible, supervisors at the location of the internships will also evaluate interns.

A thesis is not a requirement for this degree. However, research is an important component of the curriculum and is supported by at least one research seminar course. Additionally, students focus on independent research and writing projects through the two Writing Tutorial courses, and this work is subsequently developed into a finished and publishable document.

Upon completion of the M.A. in Design Criticism program, graduates of the program should have the necessary knowledge and skills to compete in electronic and print media positions in architectural organizations, administrative positions in architectural organizations, editorial positions with magazines and journals, or be employed as teachers and lecturers in higher education, among others.

Assessment of Student Learning Outcomes

Outcomes of student learning in the M.A. in Design Criticism program will be assessed using a number of measures to determine their ability to:

- situate and expand upon the major texts in the history and theory of modern and postmodern architecture design;
- communicate effectively both orally and in writing and be familiar with current and emerging communication technology in the discipline;
- deploy the Western architectural canons in architecture, landscape, and urban designs, and the cultural factors that have shaped them, in order to advance a significant and timely argument or project for architecture and design today;
- generate archival evidence and original field data, as well as develop parallel strategies for graphic argumentation through the various genres of maps, diagrams, datascapes, juxtapositions, and statistical charts;

- engage new audiences and publics in the critical dialogue of modernism, postmodernism, urbanism, and post-metropolitan theory; and
- be conversant with the major contributors to design, theory, and criticism such as Reyner Banham, Jean Baudrillard, Jacques Derrida, Peter Eisenman, and Michel Foucault.

Other measures that will be used to assess student learning in the proposed program include: 1) tests and quizzes to measure student comprehension and interpretation of major ideas in the discipline and to analyze classic modernist histories of architecture and design; 2) writing evaluation to determine students' ability to raise clear and precise questions, use abstract ideas to interpret information, and consider diverse points of view; 3) evaluation of students' written portfolios, which represent quality and innovative thought, critique, and argumentation of design issues; 4) mid-term and final examinations which measure student achievement; and 5) student retention, as well as graduation rates and time-to-degree completion.

Program Assessment

Consistent with IBHE staff requirements, the University will submit a progress report on behalf of the proposed M.A. in Design Criticism program at the end of the third year of operation. The report will summarize key areas of accomplishment and challenges that remain to be addressed. As is true of other programs at the University, the program faculty and external experts in the field will participate in the University's eight-year program review process to assess the program using multiple indicators to determine its strengths and weaknesses. Factors that will be considered in the assessment include retention and graduation rates, percentage of students involved in faculty research and other projects, the level of alumni and employer satisfaction with the program, percentage of graduates employed in relevant industries and occupations, career advancement achieved by graduates, year-end "show" which highlights superior writing of graduates chosen by a panel of architects, critics, and educators, publications of written work and research by graduates and their citation by others in the field. A summary of the program review, including the program's strengths and weaknesses, as well as steps that will be taken to improve the program, will be submitted to the IBHE with summaries of other programs reviewed in the same cycle.

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 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 M.A. in Design Criticism program will be housed in the Art and Architecture Laboratories on the east side of the UIC campus. The School of Architecture (the School), which will administer the proposed program, shares the building with the industrial, graphic design, and electronic visualization/media programs of the School of Art and Design. The gross floor area of the building is 78,222 square feet, including a studio allocation of 29,634 square feet, which is more than adequate for the existing one bachelor and two Master's programs. The facility affords each student a desk and a lockable storage space. In addition, there are three seminar rooms, and also three rooms with dedicated LCD projectors for use by students and faculty for digital presentations. These facilities and equipment will also support the proposed program.

Library

At this time there is no need for additional library resources, including general monographic collections, to support the proposed program. The University's library has been collecting at a research level in all aspects of architectural, graphic, and package design for over 25 years. Most books purchased are written in English, and a substantial selection of significant works is written in French, Italian, and German. These books support the existing Master of Architecture and other related programs at the baccalaureate, Master's, and doctoral levels at UIC. They will be available to support the proposed program.

Design, particularly Chicago-related design and that of various Bauhaus pioneers who had Chicago connections, is a major collecting focus of the Richard J. Daley Library's Special Collections Department (the Department). For close to 30 years, the Department has actively sought and acquired personal papers and collections related to design. These resources also will support the proposed program. Should there be a need for additional library resources to support the program, it will be addressed by the School or the University.

Technology and Instructional Resources

The School of Architecture has implemented the wireless network in all studios, and all incoming undergraduate and graduate students are required to own laptops to take advantage of the resources. As a result, all students have full computer and Internet access at their studio desktops. In support of this requirement, and to better serve students, the School negotiates reduced pricing on computers and software for students.

Site-licensed software currently in campus public computer labs include Adobe Creative Studio CS (including PhotoShop CS, InDesign CS, Illustrator CS, and Dreamweaver), AutoCAD 2008, AutoDesk VIZ, and many other AutoDesk programs, Microsoft Office, and a host of other University site-licensed packages that support the existing programs and that also will support the proposed program. A full-time technology specialist in the School provides daily supervision and support to the hardware, software, peripheral, and network resources for the benefit of students and faculty in the School during business hours and off-hours. At this time, there are no unmet technology and instructional resource needs for the proposed program and the existing programs.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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 two-year M.A. in Design Criticism program will be the primary responsibility of two faculty members and one part-time faculty member who may be assisted by a host of other faculty members at the School of Architecture. Information about them is summarized below. A full-time technology specialist in the School provides daily supervision and support to faculty and students as needed.

The proposed program will have a dedicated Program Committee of seven faculty members, including the Program Director, two associate professors, and an adjunct professor who is the Curatorial Chair of Architecture and Design at the Art Institute of Chicago. In addition to their diverse contemporary design-research agendas, this distinguished group collectively represents current and former editors of ten publications, including *Assemblage, Any, Hunch, Log, Content, and the Journal of Architectural Education.* They will be responsible for overseeing the work done in the proposed program and for advising students in the program.

Proximity of the School of Architecture (the School) to the center of Chicago has afforded the School the ability to draw on a distinguished and diverse group of full-time and adjunct faculty, including architects, historians, developers, theorists, engineers, and designers. In the School there are currently 25 faculty members of whom 20 are tenured/tenure track and five are clinical faculty, as well as 18 adjunct faculty from different generations and backgrounds. Six of the tenured faculty are full professors, including one woman and one Spaniard. Six of the full-time faculty members are associate professors, one is an African American, one is a Latin American, one is a Canadian, and three are women. One half of the eight assistant professors are women, and one half of the eight are from outside the United State (Argentina, Australia, Ireland, and Germany). The majority of the full-time faculty holds a professional degree in architecture and/or is a licensed architect; nine of the 20 tenured/tenure track faculty and all five clinicians are engaged in professional practice in addition to teaching. This diverse group of faculty members benefits the programs offered in the School, and it will support the proposed program.

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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are requested to establish the M.A. in Design Criticism program. The University has indicated in the proposal that the budget for the program will be $198,720 annually in the second through the fourth year (the total will be less in the first year of operation). Of that total, only $33,120 is attributed to the program's two new courses that require additional teaching salary funds. The new costs totaling $33,120 will be covered in part by the expected tuition differential of approximately $20,000 per year. Remaining costs will be covered by existing faculty salary lines, as the two new courses will also function as required electives in the School's other existing graduate programs.

The remaining budget balance of $165,600 represents funds for the existing units in the School, and other resources such as library materials, instructional resources, equipment, classrooms, and offices. Furthermore, the program will enroll no more than 16 students a year during the first four years, and it will capitalize on the School's existing courses, faculty, and academic strength, thereby boosting enrollment in the School with minimal additional resources. For example, of the 14 total courses for the two-year program, ten of them are existing courses and only four are new (and two of these are independent advising with faculty, which will be offered above their normal teaching load). Another example is, while few faculty members will have primary responsibility for the program, the School has 25 faculty members and 18 adjunct faculty members who may support the proposed program as needed.

Accreditation and Licensure

1050.30(b)(3): 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.

1050.50 (a)(1) Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50 (a)(2)(C) Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

The M.A. in Design Criticism program is an academic, non-professional degree and does not fulfill any requirement for the NAAB. There is no specialized accreditation for this degree. Also, there is no licensure for the program's graduates.

Program Information

1050.30 (b)(2)(A) The information 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, and 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 as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS); 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.

Information about the University's M.A. in Design Criticism program, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as University and Graduate School policies, will be published on the University's website, www.uic.edu. Comparable information about the program will be published in hard copy in the University's graduate catalog. Similar information may be obtained from the Graduate School or the School of Architecture.

Staff Conclusion. The staff concludes that the Master of Arts in Design Criticism program proposed by the University of Illinois at Chicago meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment.

University of Illinois at Urbana-Champaign

Proposed Program Title: Master of Science (M.S.) in Financial Engineering in the Prairie Region

Projected Enrollments: The University of Illinois at Urbana-Champaign has projected that enrollments in the proposed Master of Science (M.S.) in Financial Engineering program will grow from 30 students in the first year to 120 in the fifth year. It is estimated that approximately 30 degrees will be awarded in the second year and 60 degrees will be awarded annually in the fifth year and beyond.

Background

The University of Illinois at Urbana-Champaign (UIUC or University) requests authority to offer the Master of Science (M.S.) in Financial Engineering program in its home region, the Prairie Region. Financial Engineering is a relatively young, multidisciplinary field focusing on the application of engineering approaches and methods of the analysis and management of financial problems, particularly in the financial asset arena. Common problems in this area involve identifying and managing financial risk in asset portfolios, and the pricing and evaluation

of financial derivatives for optimal investment decisions. Other applications exist in proprietary security trading operations, as well as all domains where risk is an important concern. Financial engineering has emerged as the result of the ever growing complexity required in describing and solving these advanced business problems, whose resolution requires fundamental economic principles and finance theory coupled with state-of-the-art mathematical methods, computational tools, and computer programming expertise. Within a short span of only two decades, financial engineering has become a flourishing subfield characterized by its practical importance; indeed, several recent Nobel prizes in economics were awarded for works that have become the foundation of this field.

Active research in finance, operations research, and mathematics is now being devoted to the study of many emerging issues associated with new financial instruments and other topics relating to risk management, risk measurement and optimization, accounting, regulation oversight of the involved operations, and decision-making in light of the recent crisis in the financial investment industry in the United States. It is expected that the oversight will stem the recent tide of misapplication of financial engineering tools in order to protect the future financial market.

The University currently offers Master's and doctoral programs in six areas related to the proposed program: computer science, systems and entrepreneurial engineering, mathematics, applied mathematics, statistics, finance, and economics. The proposed multidisciplinary program will build upon the strong foundations established by these programs.

Need

1050.30(a)(6): A) The unit of instruction, research, or public service is educationally and economically justified based on the educational priorities and needs of the citizens 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.

Faculty members who will be responsible for the M.S. in Financial Engineering program are well informed about the recent crisis in the financial industry and the limitations of financial engineering programs, as well as steps that should be taken to improve the training of students to minimize future recurrence of the problems. To begin to address the problem, the curriculum of the program is designed to 1) maximize the chances for student success in the program while recognizing the importance of both ethical and social responsibility; 2) focus on the value and benefits the financial industry provides to society through improved risk management and increased efficiency of investment; 3) examine the sources of market failure and market inefficiency; 4) combine in the curriculum engineering and mathematics training with economics and finance instead of focusing on only the technical engineering and mathematics components; 5) bring students into contact with leading members of the industry, including representatives of the financial regulatory authorities charged with protecting the market; and 6) address social values through the planned speaker's series and field trips. It is expected by the program faculty that by teaching students in the program the limitations of financial engineering and the need to avoid temptations to abuse the tools, the program will produce effective and ethically minded graduates who will enhance rather than threaten the future of the industry.

A 2009 report of the Illinois Workforce Investment Board's (IWIB) *Information Technology Task Force Report: Findings and Recommendations* indicates the importance of the financial industry to Chicagoland. The report states that "Illinois should promote the growth of the information technology sector by promoting vertical specializations in critical industries where Illinois is a leading player such as healthcare, financial services, education, transportation,

logistics, and manufacturing." The City of Chicago has also championed that the financial industry is crucial to its economy, which is in need of a steady supply of well-trained specialists with both the ability to handle advanced quantitative techniques and the understanding of the fundamentals of financial markets and institutions. The growth of the industry in Chicagoland has been fueled by an active corporate community consisting of asset management companies, insurance companies, and some advanced corporate treasury departments. Long-term developments in the financial services industry suggest a trend toward quantitative analysis and methods. The recent financial turbulence has only increased the need for quantitative risk management techniques, and expertise in this area as it has become essential for public regulators and supervisors as well. It is expected that if approved, the M.S. in Financial Engineering program will serve as an impetus for the two sponsoring academic departments to develop interdisciplinary research into issues confronting the industry and help Chicagoland in its quest to become a more vibrant financial center in the nation.

The results of a survey conducted by the Department of Industrial and Enterprise Systems Engineering (IESE) in March 2008 have indicated that graduates of the two departments are currently affiliated with prominent national organizations such as Goldman Sachs, Renaissance Technologies, Chicago Trading Company, Symbol Capital, Princeton University, Carnegie-Mellon University, and Columbia University. While the recent financial crisis has had a negative impact in the employment in this industry in the short run, the consensus of the field leaders indicates that there are plenty of employment opportunities for graduates of the proposed M.S. in Financial Engineering program.

The current statistics do not sufficiently reflect recent problems in the financial industry. In addition, employment projections from the Illinois Department of Employment Security (IDES) indicate a growth of 28 percent in Illinois and 32 percent in the Chicago Metropolitan area between 2006 and 2016.

Comparable Programs in Illinois

Only two similar degree programs and a track within a degree program, are currently offered in Illinois. The two degree programs are: the Master of Science in Financial Mathematics at the University of Chicago and the Master of Science in Computational Finance at DePaul University. Although the two programs are similar to the proposed program, they differ in some aspects. In addition to the two programs, the University of Illinois at Chicago offers a Computational Finance track within its Master of Science in Mathematics and Information Sciences for Industry. The three programs are offered in the Chicago area while the proposed program would be offered in central Illinois.

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 mission of the M.S. in Financial Engineering program is to provide its students with significant multidisciplinary, technical, and quantitative training in the branches of finance, which deal with advanced financial instruments and the management of their risks. The topics that will be covered will be finance, numerical methods, stochastic calculus, and computer programming. The program will be jointly sponsored by the Department of Finance in the College of Business and the Department of Industrial and Enterprise Systems Engineering in the College of

Engineering. Oversight of the curriculum will be provided by a joint faculty advisory committee composed of members from the sponsoring units. The goals and objectives of the program are consistent and supportive of the mission of the two Colleges and the University.

Objectives of the program are for graduates of the program to be proficient in:

- basic disciplinary competence in financial engineering with demonstrated understanding of economic principles, finance theory, stochastic modeling, computing, and computational methods;
- specialized disciplinary competence to ensure that students are able to perform quantitative analyses, including indentifying and managing financial risk in asset portfolios and the pricing of financial derivatives;
- critical thinking and problem solving so that students will demonstrate ability to integrate the principles, theory, methods, and tools to effectively solve topical and emergent financial problems with rigor and effectiveness; and
- leadership and teamwork in order for students to use team building and high performance management behaviors to lead an interdisciplinary team to effectively solve problems.

Curriculum and Assessment

1050.30(b)(1): A) The caliber and content of the curriculum assure that the objectives of the unit of instruction will be achieved; B) The breadth and depth of the curriculum are consistent with what the title of the unit of instruction implies; C) The admission and graduation requirements for the unit of instruction are consistent with the stated objectives of the unit of instruction; D) Provision is made for guidance and counseling of students, evaluations of student performance, continuous monitoring of progress of students toward their degree objectives and appropriate academic record keeping.

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 for the M.S. in Financial Engineering program will be reviewed by a joint faculty committee from the Department of Finance and the Department of Industrial and Enterprise Systems Engineering. Successful applicants to the program will have earned a bachelor degree with one year of calculus, one semester of linear algebra and differential equations, one semester of computer programming (preferably in C/C++), and one semester of probability and statistics. Knowledge of basic finance and economics will be helpful but not necessary for admission. Given the technical emphasis in the program, applicants to this program typically will have completed a bachelor degree in an engineering field, mathematics, physics, computer science, or economics.

All applicants are expected to have earned a minimum grade point average (GPA) of 3.25 out of 4.0 in the last 60 hours of undergraduate study and a 3.5 in any previous graduate work completed. Scores on the Graduate Record Examination (GRE) general test are required of all applicants. Any applicant whose native language is not English must submit a Test of English as a Foreign Language (TOEFL) score of at least 103 on the Internet-based test, 257 on the computer-based test, or 613 on the paper-based test; or in the International English Language Testing System academic overall score of at least 7.0 with at least 6.0 in all subsections.

Curriculum

The curriculum of the program is a rigorous, three semester 48 credit hour requirement that must be completed in a lock-step, residential setting with a summer internship requirement. All the courses are at the graduate level, and each course has four credits. The curriculum is drawn from four core areas of study: finance, stochastic modeling, computing and computational methods, and an applied practicum experience with "real-world" financial modeling problems provided by practitioners in the industry and faculty members. The core will be supplemented with electives offered in the sponsoring colleges and departments and approved by a joint faculty advisory committee. However, all required courses will be offered by the Department of Finance and the Department of Industrial and Enterprise Systems Engineering.

Of the 12 courses comprising the curriculum, ten are required core courses, one is project-based, and the remainder is an elective course. Six of the 12 courses are new and designed for the program. Four courses are to be completed in the fall semester: Introduction to Finance, Financial Economics, Statistical Methods in Finance, and Financial Computing. Four courses are for the spring semester: Optimization for Financial Engineering, Numerical Methods in Finance, Financial Derivatives, and Credit Risk and Instruments. The three courses designed for the third semester are: Stochastic Calculus in Finance, Term Structure Models, and Financial Engineering Project. One elective course is to be selected from six courses, including Multi-attribute Decision Making, Applied Nonlinear Programming, Corporate Finance, Empirical Analysis of Equity Returns, and Financial Statement Analysis.

The M.S. in Financial Engineering program will be served by an advisory board composed of practitioners in the industry and academia with rotating terms. It will be managed by the program Director. The mission of the board will include: providing curricular and professional advice, serving as a source for summer internships that will provide students with real world applications, offering full-time employment opportunities, and assisting with development activities.

Assessment of Student Learning Outcomes

Assessment of student learning outcomes in the proposed program will focus on evaluating each student's demonstrated ability in areas related to: 1) basic disciplinary competence, including demonstrating an understanding of economic principles, finance theory, stochastic modeling, and computing and computational methods; 2) specialized disciplinary competency involving the ability to perform quantitative analyses, including identifying and managing financial risk in asset portfolios and the pricing of financial derivatives; 3) critical thinking and problem solving in design criticism by demonstrating an ability to integrate the principles, theory, methods, and tools in the discipline to effectively solve topical and emergent financial problems with rigor and effectiveness; and 4) leadership and teamwork by demonstrating team building and high-performance management skills that empower an interdisciplinary team to effectively solve problems.

Other assessment measures that will be used by the program faculty will include student grades in each course, GPAs, as well as graduation rates and time-to-degree completion.

Program Assessment

Consistent with the IBHE staff requirements, the University will submit to the IBHE a progress report on the M.S. in Financial Engineering program at the end of the third year of operation. The report will summarize key areas of accomplishments and remaining challenges. In addition, the program faculty will participate in the University's eight-year program review process to assess the program using multiple measures to determine the program's strengths and weaknesses. Key factors that will be used in the assessment of this program include evaluation of faculty teaching in the program, faculty research, grants, and contracts as well as scholarship, awards and honors, retention and graduation rates of students, the level of alumni and employer satisfaction with the program, input from the industry advisory board composed of practitioners in the field, and the percent of graduates employed in relevant occupations in the financial industry. A summary of the program review, including the program's strengths and weaknesses, as well as steps to be taken to improve the program, will be submitted by the University of Illinois to the IBHE with summaries of other programs reviewed in the same cycle.

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 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 University facilities that will support the program include the new Business Instructional Facility and Wohlers Hall, which serves the Department of Finance, the Transportation Building, Everitt Laboratory, Talbot Laboratory, and the Coordinated Science Laboratory that serves the Department of Industrial and Enterprise Systems Engineering. The program's administration will be housed in a suite of offices in the Digital Computer Lab, which includes space for individual study carrels for each student. Research and instructional labs that will support the program include the Decision Systems Laboratory, Optimization Laboratory, and the Market Information Lab, among others. Establishment of the new program will not impact negatively on existing facilities, such as computer usage, laboratory usage or equipment, nor will there be any additional facility costs.

Library

The program will not require additional library materials such as books, and periodicals. As a result, there will be no impact on the University Library. Numerous journals and publications that will support the proposed program are currently included in the holdings and subscriptions of the Library, including titles such as J.C. Hull: *Options, Futures, and Other Derivatives*, 2008; S.A. Zenios: *Practical Financial Optimization: Decision Making for Financial Engineers*, 2008; and S. Benninga: *Financial Modeling*, 2008.

Technology and Instructional Resources

Several Bloomberg machines and desktops will be housed in the common room of the Digital Computing Laboratory for the exclusive use of the program. In addition, existing computing and lab facilities in both departments will be available on a need basis. As an example, the College of Business has made information from the Market Information Lab available to program students through the University's website. The information includes descriptions and the uses of the various software tools available to the students. The lab includes tools such as *Crystal Ball*, a graphically oriented forecasting and risk analysis program; CapCapital *IQ*, a research platform that combines information with tools for analysis; and X_Trader 7, an advanced derivatives trading software.

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; 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; D) Support personnel, including but not limited to counselors, administrators, clinical supervisors, and technical staff, which 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 faculty in the Department of Finance and the Department of Industrial and Enterprise Systems Engineering that will sponsor the proposed program have complementary expertise to cover all courses in the curriculum for the program. On the one hand, this program is a natural extension of the existing Master of Science in Finance, whose faculty can easily handle the core finance courses for the program. On the other hand, the Department of Industrial and Enterprise Systems Engineering has the research and teaching expertise in computational finance, portfolio optimization, derivative pricing, stochastic calculus, and computational methods to support the program. As the program develops, the two departments plan to hire several additional tenured and tenure track faculty as needed using resources generated by the program's students. All faculty responsible for the program will be members of the two departments.

In addition to faculty responsibilities, the program will be served by the Director and the Assistant Director of the program, as well as clerical staff. The Director will be a faculty member with deep familiarity with the needs of the industry. He or she will play a critical role in advising students, maintaining corporate relationships, recruiting new students, and overseeing student placements. Additionally, the Director will serve as a bridge between the leadership of the two sponsoring departments.

There will be a joint faculty advisory committee from the two departments to ensure that student-teacher loads will not be significantly affected and that existing undergraduate and graduate programs will not be negatively affected by this program. The committee consisting of two faculty members from each department, and a representative of the Dean of the College of Business and the College of Engineering, as well as the program's Director will provide oversight for the program's curriculum.

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 upon supportable estimates of state appropriations, local tax support, student tuition and fees, private gifts, and/or governmental grants and contracts.

No new state resources are needed to establish the M.S. in Financial Engineering program because the College of Business, the College of Engineering, and the Urbana-Champaign campus have committed funds to cover programmatic expenses for the program during the first year of operation. The program is expected to be self-sustaining from the second year of operation, with any overages expected to roll back to the two sponsoring departments. The program is not intended to become a new department but rather to continue as a shared project of the two departments.

Revenues for the program will consist of tuition plus fees, which will be collected to supply students with computers, software and data sets, and to fund student field trips. Personnel costs will eventually include four Foundation for Teaching Economics (FTE) faculty, a director and an assistant director for the program, along with support staff. It is expected that facility costs will be minimal, and equipment costs will include computer, data, and software for educational use.

The first-year tuition revenues are projected to be $800,000 in addition to start up funds from the University. Faculty expenses for the first year are estimated to be approximately $485,000 and the other expenses are estimated at approximately $464,000, including $282,000 in salaries for the director and staff, $60,800 for travel, and student field trip costs, supplies, marketing and advisory board expenses, and $90,000 for computing, software, and data. Start-up funding prior to admitting the first class is estimated to be $369,200 which includes $205,000 for salaries and $90,000 for program marketing. As indicated above, these funds will come from the College of Business and the College of Engineering. Beyond the first year of operation, revenues for the program are projected to grow from $1,453,812 in the second year to $1,503,725. These funds will come from fees, sales, and other incomes. Revenues are projected to exceed expenditures in each of the first four years or operation.

Accreditation and Licensure

1050.30(b)(3): 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.

1050.50 (a)(1) Three years after approval of a new program, the institution shall provide a program progress report to the Board as part of the institution's annual report. The third year progress report shall describe the institution's performance in meeting program objectives and show where any improvements are necessary. The placement of a program in voluntary temporary suspension will not negate the requirement of submitting a third year progress report.

1050.50 (a)(2)(C) Requirement for Programs in which State Licensure is Required for Employment in the Field: In the case of a program in which State licensure is required for employment in the field, a program can be found to be in good standing if the institution is able to provide evidence that program graduates are eligible to take the appropriate licensure examination and pass rates are maintained as specified in the objectives of the unit of instruction. If there is no such evidence, the institution shall report the program as flagged for review.

There is no specialized accreditation for financial engineering programs. However, the proposed program will be included in The Association to Advance Collegiate Schools of Business (AACSB) accreditation review during the next regular accreditation cycle in 2014.

Programs in financial engineering are not regulated by the State of Illinois, and no licensure or certification is required to practice in the field.

Program Information

1050.30 (b)(2)(A) The information 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, and 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 as provided by the institution to the Integrated Postsecondary Education Data System (IPEDS); 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.

Information about the University of Illinois at Urbana-Champaign's Master of Science in Financial Engineering program, including a detailed description of the curriculum, admission requirements, tuition, fees, and other cost information, as well as University and Graduate School policies, will be published on the University's website, www.illinois.edu, and in the University's online Graduate catalog. Similar information may be obtained from the Graduate College, the College of Business, or the College of Engineering.

Staff Conclusion. The staff concludes that the Master of Science in Financial Engineering program proposed by the University of Illinois at Urbana-Champaign meets the criteria to implement the Board of Higher Education Act (110 ILCS 205) as set forth in the Board of Higher Education administrative rules (23 Ill. Adm. Code 1050.30), and the Illinois Board of Higher Education policies pertaining to assessment.

The staff recommends adoption of the following resolutions:

The Illinois Board of Higher Education hereby grants to Governors State University authorization to establish the Doctor of Education (Ed.D.) in Counselor Education and Supervision in the South Metropolitan Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to Illinois State University authorization to establish the Master of Chemistry Education (MCE) in the Central Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to Northern Illinois University authorization to establish the Doctor of Physical Therapy (DPT) in the Fox Valley Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to the University of Illinois at Chicago authorization to establish the Master of Arts (M.A.) in Design Criticism in the Chicago Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to the University of Illinois at Urbana-Champaign authority to establish the Master of Science (M.S.) in Financial Engineering 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.