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

Submitted for: Action.

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

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

Eastern Illinois University

- Master of Science in Sustainable Energy in the Prairie Region

Illinois State University

- Bachelor of Arts and Bachelor of Science in Legal Studies in the Central Region
- Bachelor of Science in Engineering Technology in the Central Region

STATE OF ILLINOIS
BOARD OF HIGHER EDUCATION

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

By statute, the Illinois Board of Higher Education 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. Staff recommendations are based on analyses of application materials and responses to staff questions, and, for advanced degree programs, recommendations of external consultants.

Eastern Illinois University

Proposed Program Title in the Region of Authorization: Master of Science in Sustainable Energy in the Prairie Region

> *Projected Enrollments and Degrees:* Eastern Illinois University has projected that the Master of Science in Sustainable Energy program will enroll approximately ten students in the first year increasing to 40 students in the fifth year. It has projected that approximately 20 degrees will be awarded in the program in the fifth year and about the same number annually after that.

Background

Eastern Illinois University (EIU or the University) requests authority to offer an interdisciplinary Master of Science (M.S.) in Sustainable Energy in the Prairie Region. The program is designed to provide its students with the requisite knowledge and skills to become leaders and managers in the energy industry. They will develop advanced research knowledge and skills needed for effective leadership in the field. Students will understand the science and technology related to energy production, conservation, and utilization, as well as the economic, environmental, and policy impacts of sustainable energy practices.

The proposed program will build upon the strengths and successes of the existing related academic units at the University, including the Renewable Energy Center, the new Center for Clean Energy Research and Education, and the collaborating academic programs in Biological Sciences, Chemistry, Communication Studies, Economics, Geology-Geography, Physics, and Political Science, as well as the School of Business and the School of Technology.

Eastern Illinois University is committed to reducing its dependency on fossil fuels and to lead to sustainable environmental and energy best practices. The University's Renewable Energy Center uses biomass gasification technology to meet the complete steam and partial electricity needs of the campus by replacing the coal-burning central plant. The Center is a "living laboratory" that provides students the unique opportunity to learn the realistic operation of a true renewable energy application. These activities are largely in response to the goal of the President to make the University a leader in renewable energy education, research, and application by harnessing the resources of this program and the other related University units.

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.

About 92 percent of the world's energy currently comes from non-renewable sources such as petroleum, coal, natural gas, and nuclear power. In order for the earth to continuously support human life and other living organisms, it is essential to achieve a very significant level of energy sustainability. To do so, responsible organizations must develop values, policies, and technologies that embrace a diverse range of energy solutions. Renewable energy offers great potential for the world to reduce the current level of dependence on fossil fuels, which would then lead to a cleaner environment, better preservation of natural resources, and more economic opportunities. As reported by Blockstein & Schockley in 2006, while there are tremendous opportunities and needs for education at all levels in the energy sciences, few universities offer courses, let alone academic majors in energy sciences and engineering of energy studies. Eastern Illinois University is committed to becoming one of the leaders in higher education through initiatives such as the proposed program.

In a March 2012 study of employment in green goods and services, the U.S. Bureau of Labor Statistics reported that there were 3.1 million green jobs. These jobs are defined as those found in businesses that produce goods and provide services that benefit the environment or conserve natural resources. Also, according to a 2011 report from the Brookings Institution, the clean economy added half a million jobs between 2003 and 2010, outperforming the nation as a whole during the recession. According to these sources, employment prospects for energy managers in general, both at the state and national levels, are good. For example, the Bureau of Labor Statistics has projected that jobs for management analysts, a category that includes those who advise organizations on improving energy efficiency, will grow at 22 percent, a rate that is much faster than the national average of all occupations. The median salary for those analysts is $78,160. The Bureau has projected that jobs for administrative services managers, a category which includes plant manager, operators, and distributors, will grow by 15 percent and the median salary for these professionals is $65,360. The 2011 *Illinois Green Jobs Survey* found that in early 2011, there were 115,208 green jobs in Illinois with about 27 percent in construction, 16 percent in manufacturing, and ten percent in wholesale trade.

According to the Illinois Department of Employment Security's *Status of Green Industries Pertaining to Illinois*, imports of oil to the U.S. cost the nation an exorbitant amount of money. To illustrate, oil imported into the U.S. in 2010 translated into more than $400 billion leaving the country at the cost of about $100 per barrel.

At this time, only three master's degrees related to energy are offered in Illinois: the M.S. in Bioenergy by the University of Illinois at Urbana-Champaign; the M.S. in Advanced Energy and Fuels Management by Southern Illinois University at Carbondale; and the Master of Energy Engineering by the University of Illinois at Chicago.

The Illinois Public Agenda for College and Career Success

The Master of Science in Sustainable Energy will address Goals 3 and 4 of *The Public Agenda*. Goal 3, to *increase the number of high-quality post-secondary credentials to meet the demands of the economy and the increasingly global society*, by recruiting, educating, and awarding master's degrees and contribute to meeting the state and national goals and priorities for more post-secondary credentials.

Goal 4, to *better integrate Illinois' educational, research, and innovation assets to meet economic needs of the state and its regions*, by engaging students and their faculty in teaching, applied learning, and collaborative research designed to help the University, the state, and the nation address the increasing demand for energy in the face of decreasing natural resources. The challenge calls for the education of citizens and professionals who understand the underlying scientific and technological principles and their interplay with communities, private sectors, and governmental policies and regulations. Students trained in the multi-disciplinary program in Sustainable Energy will be prepared to aid the economic development of the state and solve some of the energy problems.

Comparable Programs in Illinois

As indicated above, only three master's degree programs closely related to sustainable energy are currently offered in Illinois. Additionally, a few similar programs and research centers exist in Illinois in addition to the offerings of Eastern Illinois University. They are the B.S. in Renewable Energy and the Center for Renewable Energy at Illinois State University, the Energy Resources Center at the University of Illinois at Chicago, and the Center for Advanced Bioenergy Research at the University of Illinois at Urbana-Champaign. Even when considered together, there is still much room in Illinois for the proposed program and additional similar programs to train students to meet the needs of businesses, government agencies, and the non-profit sector to use energy cleanly and efficiently in Illinois given the importance and urgency to address the energy challenges facing the nation now and in the future.

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.

Eastern Illinois University is committed to reduce its dependency of fossil fuels in order to practice sustainable environmental and energy practices. An example of one of the ways this goal will be achieved is the University's Renewable Energy Center use of biomass gasification technology to meet the complete steam and partial electricity needs for campus by replacing the existing coal-burning central plant. The plant is a "living laboratory" that provides students a unique opportunity to learn the realistic operation of a true renewable energy application. In conjunction with the new Center and the Center for Clean Energy Research and Education, the proposed program will help to make the University a leader in renewable energy education, research, and application as envisioned by the President.

The M.S. in Sustainable Energy will contribute to achieving the University's goals by ensuring that students who complete the program will:

1. Understand the science and technology related to energy production, conversion, utilization, and conservation.
2. Understand the economic, environmental, and policy impact of sustainable energy practice for a sustainable society.
3. Be able to apply basic business, economic, and technology management principles to energy-based research and problem-solving.
4. Be able to conduct energy-related research.
5. Be able to communicate effectively orally and in writing with professionals in the field, representatives of the energy industry, and lay people.

The goals and objectives of the Master of Science in Sustainable Energy are consistent and supportive of Eastern Illinois University's mission and priorities.

Curriculum and Assessment

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

Admission Requirements

To be admitted to the Master of Science in Sustainable Energy program, an applicant must have earned a baccalaureate degree in a relevant academic major from an accredited institution recognized by the University and have achieved a minimum undergraduate cumulative grade point average (GPA) of 2.75 or a 2.75 on the last 60 semester hours of coursework on a 4.0 scale. In addition, each applicant must submit Graduate Record Examination (GRE) or the Graduate Management Admission Test (GMAT) scores and documentation of relevant experience and interest to work in the energy industry or a related occupation. Students admitted provisionally will be required to complete the coursework in related fields to meet the admission requirements established by the Program Advisory Board.

Curriculum

The curriculum for the Master of Science in Sustainable Energy consists of a minimum of 36 semester hours or 12 graduate level courses which encompass key areas in science for 15 hours; technology management for nine hours; policy and economics for six hours; research and experience for six hours; and communication for three hours. Students must complete 12 courses including:

- Bioenergy and Bioresources or Environmental and Biological Sustainability,
- Energy Chemistry,
- Energy and the Environment,
- Biomass Gasification,
- Science and Technology Leadership or Organizational Behavior and Group Dynamics,
- Total Quality Systems or Operations Management,
- Business Operations in Sustainable Energy Facilities,
- Research in Technology,
- Sustainability Practicum, and
- Sustainable Energy Research.

Although a thesis is not required for students to complete this program, prior to graduation, students will be subjected to rigorous requirements related to the Sustainability Practicum course which may be the same or higher than the requirements for a thesis. During the practicum, students will job-shadow professionals involved in energy generation, conversion, and utilization positions to develop a full understanding of the flows of materials, information, and people in a typical energy facility. The practicum experience will be evaluated weekly based on students' comprehensive reports and oral presentations. In addition, students will be required to begin their supervised research when taking the Sustainability Energy Research course early in the program. The course has many requirements including: research objectives, literature review, hypothesis, assumptions and limitations, research methods, data analysis, conclusion, and an oral presentation to a committee of faculty. Additionally, students will be required to successfully complete a comprehensive examination.

It is expected that at the end of the practicum students will: demonstrate advanced scholarship through guided research; demonstrate a depth of knowledge in a specific area of energy research; design and implement a plan of research in the field of sustainable energy; analyze the collected data critically and write an effective report based upon the research data and facts; and present the data and the report to an informed audience of the program faculty and others.

Assessment of Student Learning Outcomes

In addition to tests and examination in individual courses, assessment of student learning outcomes in this program will take place at three key points:

- Toward the end of the program, students will be required to pass a comprehensive examination;
- During the practicum, students will be critically evaluated by faculty and site supervisors to make sure they have mastered and can demonstrate critical aspects of material flow, energy flow in a typical energy production system, information flow, and leadership and managerial practices; and
- In the research course, students will be supervised by a faculty member and the outcomes of research reports and presentations will be evaluated by a group of faculty.

Program Assessment

Consistent with the IBHE staff requirements, the University will submit to the IBHE a progress report on the Master of Science in Sustainable Energy program at the end of the third year of operation. The report will summarize key areas of accomplishments by the faculty and

any remaining challenges and how each challenge will be addressed. In addition, the program faculty will participate in Eastern Illinois University's eight-year program review process to assess the program using multiple measures including evaluation of faculty teaching in the program by students, the level of faculty research and scholarship, awards and honors, retention and graduation rate of students in the program, and the level of alumni and employer satisfaction with the program. 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 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.

As an interdisciplinary program, the Master of Science in Sustainable Energy will have sufficient facilities and equipment contributed by the collaborating academic units at the University, including Biological Sciences, Chemistry, Communication Studies, Economics, English, Geology-Geography, Physics, and Political Science, as well as the School of Business and the School of Technology. Many of these units have a history of collaborating in the University's academic programs and centers related to clean energy and renewable energy. Some of the key teaching and learning in this program will take place in the Renewable Energy Center (REC), the new $55 million biomass-burning facility. REC has earned the University's honors as a Leadership in Energy and Environmental Design (LEED) approved facility. In the near future, a new $1 million Center for Clean Energy Research and Education building will be completed and its resources will be available to this program.

Library

Booth Library, the University's main library, maintains more than 2,300 books, journals, and electronic resources and databases related to renewable energy and it provides access to over 7,300 such resources through I-Share, a consortium of academic libraries in Illinois, to which the Library is a member. In addition, staff members have developed a renewable energy "portal" of subject-specific databases (Agricola, Biosis, Environment Complete, Greenfile), a total of 229 journals ranging from *Advances in Environmental Sciences* to *Wetlands Ecology and Management*, e-books, research guides, and other web-based resources. The Library has created a repository called "the Keep" that facilitates the storage, safe-keep, and dissemination of students' intellectual work. During the past year, the most frequently downloaded document from the repository was a graduate student thesis on wind energy application, a study on vertical wind turbines.

Technology and Instructional Resources

The many instructional technology resources of the University and those that belong to the collaborating academic units and centers involved in the development of this program will be available to this program. Most of the partners are already very well established.

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.

Fifteen existing faculty members from the disciplines of biological sciences, chemistry, communication studies, economics, English, geology-geography, physics, political science, and technology will support the interdisciplinary Master's in Sustainable Energy. Each of the disciplines of biological sciences, chemistry, and technology is represented by three faculty members, while each of the other fields is represented by one faculty member. All faculty members have earned PhDs in their disciplines and five of them are full professors. As a group, the faculty members have a strong record of publications in refereed journals and other professional outlets, as well as active participation in professional organizations and activities and many have accomplishments in research, receiving external grants and contracts, and advising or directing theses that rival the productivity of some faculty responsible for doctoral programs. The number and qualifications of the faculty responsible for this program is more than sufficient to meet the needs of this 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 this program because the approximately ten academic units and research centers that are collaborating to establish this program have nearly sufficient existing and expected resources. It is indicated in the proposal that only about $50,000 in additional funds are needed to initiate the program. The budget of the program is estimated to grow from $375,000 in the first year to $1,726,000 in the fifth year. These funds will come from many sources, including: $700,000 from internal University reallocations; $300,000 in pledges by the Charleston Charitable Foundation, the research arm of the program; potentially up to $6.6 million in grants based on proposals that have been submitted by the Renewable Energy Center; $499,756 in funds from the U.S. Department of Agriculture for the "Multi-scale, Multi-Taxa Evaluation of Midwest Bioenergy System Interactions with Wildlife and Agricultural Pests;" and tuition paid by students 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.

Currently, there is no specialized accreditation in fields related to sustainable energy. Eastern Illinois University is accredited by the Higher Learning Commission of the North Central Colleges and Schools. The institutional accreditation covers all degree programs offered by an approved college or university.

Program Information

1050.30 (b)(2)(A) The information the institution provides for students and the public…(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 Eastern Illinois University's Master of Science in Sustainable Energy 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.eiu.edu. Comparable information about the program will be published in hard copy in the University's graduate catalog. Similar information may be available from the Lumpkin College of Business and Applied Sciences or the Graduate School upon request.

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

Illinois State University

Proposed Program Title in Region of Authorization: Bachelor of Arts and Bachelor of Science in Legal Studies in the Central Region

> *Projected Enrollments and Degrees:* The University has projected that seven students will enroll in the Bachelor of Arts and the Bachelor of Science in Legal Studies in the first year and approximately 25 students will enroll in the fifth year of operation. In addition, the University has projected that approximately ten degrees will be awarded in this program in the fifth year and a similar number of degrees annually in the following years.

Background

Illinois State University (ISU or the University) seeks authority to offer an interdisciplinary Bachelor of Arts (B.A.) and Bachelor of Science (B.S.) in Legal Studies in the Central Region where the University is located. The program is developed from an existing Minor in Legal Studies offered by the Department of Politics and Government in the College of Arts and Sciences. The minor is well established and is accredited by the American Bar

Association (ABA). The proposed program is designed to provide specialized knowledge and skills for employment of its graduates as paralegals. The proposal is a response to current market demand for employment of paralegals and legal professionals and in accord with the report of the National Federation of Paralegal Associations that a four-year degree in legal studies has become the hiring standard in most markets.

Beginning in 1975, what is now called the Department of Politics and Government but was then called the Department of Political Science offered a Minor in Legal Studies. In 2010, the ABA recognized the Legal Studies program as an approved paralegal education program. Since its inception, more than 500 students have completed the Minor. The strong student demand for the Minor, coupled with the prized approval of the ABA, and the growing trend in the bachelor's degree as the entry-level credential for professional employment in the occupation, are impetus for the University's development of this program. If approved by the IBHE, the program will be administered by the Director of Legal Studies within the College of Arts and Sciences.

The current Minor is connected to the legal community through 1) the existing Legal Studies Advisory Committee and 2) an internship program with established relationships with private firms, corporate legal offices, and governmental agencies. Additionally, it is affiliated with Lambda Epsilon Chi (LEX), the national paralegal honors society that recognizes those legal students who display outstanding academic performance. Given the demonstrated curricular rigor, and the high demand for the program, the University will continue to offer the Minor to students who will prefer it to the proposed program. Such students will probably complete baccalaureates in other fields of studies.

Institutional Completion Rates

Criterion 1050.30(b)(1)(G) provides that success in student progression and graduation, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider the following factors, based on results for similar institutions: (i) Graduation rates, degree-completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which shall be, at a minimum, higher than that of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

Illinois State University is in the primarily baccalaureate-granting, selective-admission comparison group in Illinois. Cohort graduation is based on those seeking a bachelor's degree.

Cohort Graduation Rate	Group Mean	Group Median	Rank
71.0%	52.3%	54.9%	9/65

Undergraduate Completions per 100 FTE	Group Mean	Group Median	Rank
24.6	22.2	22.2	16/67

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.

Employment outlook for paralegals and legal assistants is very promising between 2010 and 2020 according to projections by the Illinois Department of Employment Security and the U.S. Bureau of Labor Statistics. The Illinois projections indicate that employment growth between 2010 and 2020 will be 22.3 percent compared to 8.6 percent projections for all occupations during the same period. At 24.9 percent projected growth between 2008 and 2018, it appears that significant growth in the occupation is fairly stable. These numbers provide one explanation why the Minor has educated over 500 students since its creation.

High demand for jobs in the occupation has led to the recommendation of the National Federation of Paralegal Associations that the baccalaureate become the professional job-entry credential. Accordingly, by offering the proposed program in a four-year institution, the Department will produce graduates who meet the needs of Illinois and national employers and meet the standards of the American Bar Association and the national paralegal honors society.

The Illinois Public Agenda for College and Career Success

The Bachelor of Arts and Bachelor of Science in Legal Studies will address Goal 1 and 3 of *The Illinois Public Agenda*. Goal 1, to *increase educational attainment to match the best-performing states,* will be addressed by (1) making the program accessible to prospective students in the University's service region in the Bloomington-Normal area, including place-bound residents, (2) meeting the needs of students who complete associate paralegal degrees at the Illinois Central College in Peoria and the South Suburban College who are interested in seeking baccalaureate degrees, and (3) expanding access to the program to underrepresented groups who have significant achievement gap in baccalaureate degree attainment.

Goal 3, to *increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly a global society*, will be addressed by recruiting, educating, and awarding high quality degrees in a program to be accredited by the American Bar Association to contribute to meeting the state and national priorities for more post-secondary credentials.

Comparable Programs in Illinois

Many associate degree programs and bachelor's programs are currently offered in Illinois in legal studies, including associate degrees at 15 community colleges, four online bachelor's programs, and nine bachelor's programs at public and private colleges and universities. However, there is no bachelor's program in the field in the University's surrounding area which stretches from Lincoln through Bloomington-Normal to Peoria. As a result, there is unmet need for the program in Illinois State University's service region.

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 Bachelor of Arts and Bachelor of Science in Legal Studies is designed to provide its students with knowledge and skills to complete eight competencies and their associated components in the discipline, including critical thinking skills, general communication skills, legal research skills, legal writing skills, computer skills, interviewing skills, acquisition of an understanding of the paralegal profession, ethical skills, and law office management skills.

The goals and objectives of the program are consistent and supportive of Illinois State University's mission and priorities that address the goals of *The Illinois Public Agenda for College and Career Success*.

Curriculum and Assessment

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

Admission Requirements

To be admitted to the bachelor's in Legal Studies program, an applicant must meet the general undergraduate admission requirements of the University including holding a high school diploma or a GED and also completing IBHE and the state's recommended high school courses for college-bound students. The requirements consist of:

- Four years of English,
- Three years of mathematics (algebra, geometry, algebra II – trigonometry or higher),
- Two years of natural sciences with laboratories,
- Two years of social sciences,
- A foreign language for two years in one language or two years of fine arts, and
- Two years of elective courses.

Students are not fully admitted to this program until they have successfully completed POL 201: Introduction to Law for Paralegals.

To be admitted, a transfer applicant must have an equivalent of an associate degree or 60 semester hours with a cumulative grade point average (GPA) of at least 2.00.

Curriculum

The curriculum for the Bachelor of Arts and Bachelor of Science in Legal Studies consists of 120 semester hours of which 40 hours are in required core courses from Political Science and Legal Studies, 18 hours of approved courses selected from courses in Legal Studies, Political Science, Criminal Justice Studies and other disciplines such as History, Philosophy, Geography, English, and Sociology.

The eight required Departmental 100, 200, and 300 level courses are:

- U.S. Government and Civil Practices,
- Introduction to Law for Paralegals,
- Legal Research I and II,
- Political Science Professional Development,
- Litigation I and II, and
- Professional Practice: Paralegal Internship.

A student majoring in the proposed program who selects the Bachelor of Arts Track must successfully complete two-years in a foreign language or a functional equivalent. A student who selects the Bachelor of Science Track must successfully complete at least a three-hour course in natural sciences, mathematics, statistics or technology beyond the general education requirements in one of the fields. Additional elective courses in the program that directly prepare students for employment are: Introduction to Torts; Investigative Techniques and Evidence; Probate Law; Family and Domestic Relations Law; Criminal Law; Employment Law; Trial Advocacy; Legal Writing; Juvenile Law; and Rules of Evidence for the Administration of Justice.

Internship is a requirement and it may be completed in law offices, law departments, or governmental agencies. Specific duties in the internship vary, but they usually encompass research and drafting experiences, and also in many cases client contact. Four modes for evaluating students during internships are: monthly activity reports accounting for the required work, mid-term evaluation submitted by supervising attorneys, the final evaluation submitted by supervising attorneys, and summary essays about the internship submitted by interns.

Assessment of Student Learning Outcomes:

Administrators will conduct assessment of student learning outcomes in numerous ways: by regularly employing various assessment tools, including course tests, quizzes, and examinations; by grading document drafting assignments and research assignments; by grading electronically submitted homework; by grading participation in group assignments; and by employing the four levels of internship evaluation listed above. These assessment tools are used in the current Minor and they will be used in the proposed program to ensure that students in the program meet the standards of the ABA. Also, the assessment tools will contribute to ensuring that the program continues to meet LEX standards.

Program Assessment

Consistent with the IBHE staff requirements, the University will submit to the IBHE a progress report on the Bachelor of Arts and Bachelor of Science in Legal Studies at the end of the third year of operation. The report will summarize key areas of accomplishment by the faculty and any remaining challenges and how each challenge will be addressed. In addition, the program faculty will participate in Illinois State University's eight-year program review process

to assess the program using multiple measures including evaluation of faculty teaching in the program by students, the level of faculty research and scholarship, awards and honors, retention and graduation rate of students in the program, and the level of alumni and employer satisfaction with the program. The faculty will use measures such as the percent of graduates employed in occupations closely related to legal studies. Approval of the ABA and meeting the standards of LEX will be other modes of assessing the program. The Legal Studies Advisory Committee, which meets twice a year, will contribute advice and recommendations for improving this program as needed. 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 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.

If approved by the IBHE, the Bachelor of Arts and Bachelor of Science in Legal Studies will have sufficient facilities and equipment to meet its needs because the ABA-approved Minor in Legal Studies currently has nearly all resources it and the proposed program would need. The existing resources for the Minor include classrooms in Schroeder Hall, a recently renovated building. Schroeder Hall has offices for the Director of the Minor, faculty members, and office support staff. Each classroom is equipped with a document camera and a laptop computer. Images from these media can be projected on a large screen during class sessions and each room is equipped with a VHS and DVD player. Four computer labs are available for instruction and individual desktop computers are available for each student. CaseSoft (including: CaseMap, DepPrep, NoteMap, TextMap, and TimeMap) and SmartDraw are installed on the computers in the four Schroeder Hall labs and the student computer lab.

Library

During its long history, the Minor in Legal Studies has assembled a significant number of library resources, including key textbooks and academic journals to meet its needs to maintain standards of the accreditation and the honor society. It is expected that the resources will be adequate to support both programs. Twelve key textbooks are listed in the proposal and they include:

- *Trusts, and Estates for Legal Assistants,*
- *Introduction to Paralegal Studies: A Critical Thinking Approach,* 4th Edition,
- *Legal Writing in Plain English,* 2001,
- *Fundamentals of Litigation for Paralegals,* 7th Edition,
- *Evidence for Paralegals,* 4th Edition,
- *Fundamentals for Criminal Practice: Law and Procedure,* 2012,
- *Interviewing and Investigating: Essential Skills for Paralegal,* 3rd Edition,

- *A Uniform System of Citation*, 19th Edition, *and*
- *Illinois Court Rules & Procedure, Volume I*, State, 2012.

All students enrolled at the University have access to *Lexis* and *WestLaw* through the Milner Library website. The proposal lists additional 18 library resources in hard copies or online for the existing Minor and the proposed program, including: *Illinois Compiled Statutes*, *Illinois Supreme Court and Appellate Court Reporters*, A*ll Federal Reporters for District Courts and Circuit Courts of Appeal*, *Shepard's for Illinois*, *United States and Federal Citations*, *Illinois Laws and Practice*, *Illinois State Bar Journal*, *Journal of Paralegal Education and Practice*, and *Legal Assistant Today*.

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.

Ten qualified faculty members will be responsible for supporting the existing Minor and the proposed program. They include the current Minor program Director who is a full-time tenure track faculty member who has a J.D. and two full-time faculty members who hold a J.D. and a Ph.D. in Political Science, respectively. Each of the rest of the faculty members has many years of relevant experiences. Several of the adjunct faculty members are practicing attorneys. For example, one is a sitting judge who had served as a public defender for 20 years, one faculty member is a retired judge and a former State's Attorney, and another is a corporate labor and employment counsel. Together they bring the practical aspects of the profession to the classroom, which is an important component of the requirements of the ABA program approval guidelines. The ABA requires that a Director of a legal studies program be a full-time faculty member, which is the case at Illinois State University. The University believes that the number and qualifications of the existing faculty members are sufficient to support the Minor and the B.A. and B.S. in Legal Studies and also that its level of use of part-time faculty members is compatible with the ABA guidelines.

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 proposed baccalaureate program in Legal Studies because the existing Minor has assembled the needed resources over the years. Projected enrollments in the program will contribute additional funds. According to the University's plan, the projected budgets of this program will grow from $106,480 in the first year to $154,996 in the fifth year. If additional resources are needed, the University will provide them through internal reallocations or external funding.

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.

Illinois State University's existing Minor in Legal Studies is approved by the ABA. If the proposed program is approved by IBHE, there is a plan to seek approval by the ABA and to maintain the existing accreditation of the Minor. The University is accredited by the Higher Learning Committee of the North Central Association of Colleges and Schools.

The proposed program is not designed to prepare its students for licensure because the State of Illinois and the vast majority of states do not license paralegals. However, the National Association of Legal Assistants, Inc. operates a voluntary certification program for legal assistants. Completion of this program will meet only the educational component of the eligibility requirements for certification exam.

Program Information

1050.30 (b)(2)(A) The information the institution provides for students and the public…(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 Illinois State University's Bachelor of Arts and Bachelor of Science in Legal Studies program, including a detailed description of the curriculum, admission requirements, tuition, fees and other cost information as well as university policies, will be published on the University's website, www.ilstu.edu. Similar information will be available from the College of Arts and Sciences upon request.

Staff Conclusion. The staff concludes that the Bachelor of Arts and the Bachelor of Science in Legal Studies program proposed by Illinois State University meets the criteria to implement the Board of Higher Education Act (110 ILCS 205/et.seq.) as set forth in 23 Illinois Administrative Code, Ch. II, Section 1050.30, and the Illinois Board of Higher Education policies pertaining to assessment and accreditation or licensure.

Illinois State University

Proposed Program Title in Region of Authorization: Bachelor of Science in Engineering Technology in the Central Region

Projected Enrollments and Degrees: The University has projected that 64 students will enroll in this program in the first year increasing to 80 students in the fifth year of operation of the Bachelor of Science in Engineering Technology. It has projected that 16 degrees will be conferred in the first year and 20 degrees in the fifth year and annually thereafter. Degrees will be awarded in the first year because students who are close to completing the Sequence would have completed significant curricular requirements for the degree.

Background

Illinois State University (ISU or the University) requests authority to offer an interdisciplinary Bachelor of Science (B.S.) in Engineering Technology in the Central Region. The proposed program is designed to provide admitted students with theoretical knowledge and experiences (or theory-into-practice) in automation, product design, process control, plastic materials, quality management, and technical project management in government and private enterprises. Coursework in the program emphasizes the management of people, technology processes, and materials through hands-on activities. Initial employment opportunities for graduates of this program include: project management, process control, production management, product design, quality control support, and technical sales. The program is an outgrowth of a well-established and successful Sequence in Engineering Technology within the B.S. in Industrial Technology. Even before the program is an autonomous degree, the Sequence is nationally recognized and it is accredited by the Association of Technology, Management and Applied Engineering.

Curricular offerings in the Department of Technology in the College of Applied Sciences and Technology changed significantly since the early 1990s when the Department operated primarily using the Sequence model. At that time, the Industrial Technology major had a robust required core of courses comprising from 24 to 28 semester hours. However, in 1996, major curricular changes led to a reduction of the significant core requirements and set the stage for the Sequences to develop into an autonomous degree program. In 2007, a decision was made for the Sequences to move toward an academic major-oriented program of study that resulted in this proposal. This change was to allow for the establishment of a curriculum structure that would permit few disciplines within the Department to better serve students by offering contemporary curricula unconstrained by large departmental requirements while maintaining quality and efficiency. Additionally, the change permits the Department to offer "instruction in various engineering support functions for research, production, and operations, and the application to specific engineering specialties."

Institutional Completion Rates

Criterion 1050.30(b)(1)(G) provides that success in student progression and graduation, and success rates in programs preparing students for certification and licensure, shall be consistent with expectations in higher education and the appropriate related field of study. At a minimum, the Board shall consider the following factors, based on results for similar institutions: (i) Graduation rates, degree-completion rates, retention rates, and pass rates for licensure and certification. (ii) Success rate, which shall be, at a minimum, higher than that of the lowest quartile of these measures for similar Illinois institutions defined as open versus competitive enrollment institutions and primarily associate versus primarily baccalaureate granting institutions. Exceptions may be made to the lowest quartile if an institution is above the national average for these measures using the same comparison categories of institutions.

Illinois State University is in the primarily baccalaureate-granting, selective-admission comparison group in Illinois. Cohort graduation is based on those seeking a bachelor's degree.

Cohort Graduation Rate	Group Mean	Group Median	Rank
71.0%	52.3%	54.9%	9/65

Undergraduate Completions per 100 FTE	Group Mean	Group Median	Rank
24.6	22.2	22.2	16/67

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 Engineering Technology Sequence has long been well established at Illinois State University. Throughout its history, its graduates have typically had little or no difficulty finding employment. Current literature indicates that occupational demands of graduates in the field will increase in the future. Specific projections include:

- Manufacturing in the U.S. is projected to experience an increase in real output from $4.4 trillion to $5.7 trillion or a 2.8 percent growth between 2010 and 2020 according to the U.S. Bureau of Labor Statistics (BLS).
- The Illinois Department of Employment Security has projected significant growth in employment in engineering technology occupations particularly for civil engineering technologists/technicians at 11.5 percent and for environmental engineering technologists/technicians at 18.8 percent between 2010 and 2020.
- The priorities of the Illinois Department of Employment Security and the Illinois Workforce Investment Board (IWIB) led to the creation of the Manufacturing Task Force and the Entrepreneurship, Innovation and Technology Task Force to increase the state's economic competitiveness and to contribute to the solution of the critical skills gap in Illinois and shortage of qualified technicians and technologists.
- It is reported in *The Boiling Point? The Skills Gap in U.S. Manufacturing* that manufacturing worker productivity continues to increase because of the increased use of automation.
- According to the National Association of Manufacturers, U.S. manufacturers are the most productive workers in the world, far surpassing the worker productivity of any other manufacturing economy.

The Illinois Public Agenda for College and Career Success

The B.S. in Engineering Technology program will address all four Goals of *The Illinois Public Agenda*, particularly Goal 3, *Increase the number of high-quality post-secondary credentials to meet the demands of the economy and an increasingly global society.* This will be accomplished by enrolling more qualified students and educating and graduating them in one of the occupationally high demand science, technology, engineering and mathematics (STEM) fields. Successful implementation of this program will address both the Illinois and national

priorities regarding the need to significantly produce more high-quality post-secondary credentials.

Comparable Programs in Illinois

Currently there are six baccalaureate degree programs that are similar to the proposed program. They are related to engineering technology, manufacturing engineering technology, and industrial technology. They are offered by Bradley University, Eastern Illinois University, Western Illinois University, Northern Illinois University, and Southern Illinois University Carbondale. Western Illinois University's program is accredited by the Association of Technology, Management, and Applied Engineering (ATMAE). The creation of this program would have only minimal impact on the six programs in the state because the proposed program more or less already exists as a Sequence accredited by the ATMAE**.**

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.

Engineering Technology is an interdisciplinary curriculum that provides technical experiences in the following key areas: automation, product design, process control, plastic materials, quality management, and technical project management. The curriculum emphasizes the management of people, processes, and materials through hands-on activities. Those who complete the curriculum become professionals capable of managing projects and processes in government, private enterprises, and other organizations.

Five program competencies are:

1. Graduates will be able to interpret and apply basic concepts of material science such as strength of materials, structural properties, conductivity, and mechanical properties. Furthermore, they will be capable of performing various testing procedures that are both non-destructive and destructive on materials.
2. Graduates will be able to analyze and apply basic electricity and electronic principles within the various engineering environments and applications such as industrial robots, controls, and other systems.
3. Graduates will be able to monitor and control manufacturing processes or other industrial systems. Additionally, they will be able to select appropriate manufacturing processes of production applications such as forming, molding, separating, conditioning, joining, and finishing.
4. Graduates will be able to use 2-D and 3-D computer-aided design systems to create drawings and models for products, machines, jigs, fixtures, and other mechanical devices used in engineering environments.
5. Graduates will be able to read and interpret engineering documents such as blue prints, technical drawings and diagrams, production plans, tooling plans, quality plans, and safety plans.

The goals and objectives of the proposed program are consistent and support the Illinois State University's mission and priorities which mirror the Goals of *The Illinois Public Agenda for College and Career Success*.

Curriculum and Assessment

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

Admission Requirements

Applicants seeking admission to the B.S. in Engineering Technology program must satisfy all undergraduate admission requirements of the University. Specifically, freshmen admission decisions will consider a) high school transcripts, including grade trends and rigor of courses completed, b) grade point average (GPA), c) ACT/SAT scores, and d) optional academic personal statement of approximately 500 words.

Consistent with recommended IBHE high school course requirements for college-bound students, applicants for freshman admission must have completed all of the following recommended courses:

- Four years of English,
- Three years of mathematics (algebra, geometry, algebra II – trigonometry or higher course),
- Two years of natural sciences with laboratories,
- Two years of social sciences,
- Two years of one foreign language or fine arts, and
- Two years of elective courses.

Any student transferring into this program from a two-year college must have a minimum of 2.0 GPA to be considered for admission. Due to space limitation and high student demand, admission to this program may be higher than the specified minimum requirements. Earning an associate degree does not guarantee admission because the highest priority will be granted to transfer students with the strongest academic records.

Curriculum

The curriculum for the bachelor's in Engineering Technology program consists of 120 semester hours including very significant requirements in engineering technology courses comprising 75 credits hours and each student must complete an internship of 400 hours or a documented engineering technology related work experience. Internships are supervised management-oriented work-study experiences and they are supported by a three-hour elective

course, Professional Practice: Internship in Technology. All students must complete all required 15 courses. Most of the courses are at the 200 and 300 levels; 13 of the courses are:

- Introduction to Industrial Technology,
- Introduction to Manufacturing Processes,
- Automated Fluid Power Systems,
- Materials Technology,
- Project Management,
- Applied Economic Analysis for Technologists,
- Manufacturing Organization and Management,
- Introduction to Technical Drawing and Constraint-Based Solid Modeling,
- Fundamentals of Power Technology,
- Electric Circuit and Machines,
- Industrial Plastics,
- Quality Systems for Technology, and
- Safety Technology

Modern manufacturing careers require new skills such as an increased understanding of automation principles, good problem solving abilities, and general understanding of engineering principles, as well as an emphasis on innovative relationships between theory and practice. These requirements and others are addressed by this program's curriculum. As required by the College of Applied Science and Technology, this curriculum is designed to cultivate the intellectual and personal growth of individuals through premier teaching, research, and outreach activities.

The program will have an Advisory Board whose membership includes representatives from appropriate enterprises such as Tristate Machinery, Mitsubishi Motors Manufacturing of America, Nestle USA, Caterpillar Corporation, Siemens, Supply Chain Services International, and Chicago Manufacturing. Members are from levels such as president/CEO, general manager, human resources manager, robotics product manager, and process engineer. Board members and their organizations are active in supporting the internship requirements by providing internship opportunities to students and many are employers of graduates of the current Sequence in Engineering Technology.

Assessment of Student Learning Outcomes

A number of mechanisms that are currently used to assess student learning outcomes in the Sequence in Engineering Technology will be used to assess students in the proposed program. They include: tests, quizzes, and examinations in program courses; presentation of project reports; faculty review; an assessment exam given to seniors prior to graduation; and a senior exit survey. Each internship will be supervised and evaluated by a regular faculty member in the program and also a resident supervisor at the internship site to ensure the student has met the program's internship objectives.

Program Assessment

Consistent with the IBHE staff requirements, the University will submit to the IBHE a progress report on the Bachelor of Science in Engineering Technology program at the end of the third year of operation. The report will summarize key areas of accomplishments by the faculty and any remaining challenges and how each challenge will be addressed. In addition, the program faculty will participate in Illinois State University's eight-year program review process

to assess the program using multiple measures including evaluation of faculty teaching in the program by students, the level of faculty research and scholarship, awards and honors, retention and graduation rate of students in the program, and the level of alumni and employer satisfaction with the program. Also the faculty will use measures such as the percent of graduates employed in occupations closely related to engineering technology. Accreditation of the program by the Association of Technology, Management and Applied Engineering which currently accredits the Sequence in Engineering Technology will be maintained. Alternatively, if sought, accreditation by the Accreditation Board of Engineering and Technology will be another possible mode for assessing the program. 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 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 Department of Technology has laboratory and support facilities in two buildings at Illinois State University. Turner Hall is the primary facility housing the program's facilities and equipment. The resources support the accredited Sequence in Engineering Technology and they will support the proposed program. Funding provided by the Caterpillar Corporation contributed to the University's comprehensive funding campaign, and $1.2 million was budgeted to refurbish Turner Hall 160 and 160B into modern integrated facilities, including a manufacturing laboratory for engineering technology. Faculty members for the program were involved in plans for the needed equipment, including HVAC equipment, a Power Line Carrier (PLC), a robot, and conveyor system and computers. The University has committed key resources for the program, including General Purpose Plastics Technology Laboratory, Caterpillar Integrated Manufacturing Laboratory, Smart Classroom, Multi-purpose Machine Shop, and Computer Graphics. Additionally, proposals were drafted to refurbish the Machine Shop Laboratory in Turner Hall 166 with donated funds.

Library

The accredited Sequence in Engineering Technology has significant library resources, including key textbooks, technical periodicals and journals, as well as technical databases that will support the Bachelor of Science in Engineering Technology. These resources are complemented by Milner Library's Interlibrary Loan and Document Delivery services to students and faculty members, as well as its membership in the Consortium of Academic Research Libraries in Illinois consisting of over 151 libraries from which students and faculty can borrow library materials. The proposal lists of over 40 periodicals that will support the program, including:

- *ACM Journal on Emerging Technologies in Computing Systems,*
- *Automation and Remote Control,*
- *Computing in Science & Engineering,*

- *IEEE Intelligent Systems,*
- *International Journal of Robotics Research,*
- *Journal of Manufacturing Science and Engineering,*
- *Journal of Quality Technology,*
- *Manufacturing Engineering,*
- *Modern Metals,*
- *Plant Engineering,*
- *Plastics Technology,*
- *Quality Management Journal,*
- *Technological Forecasting and Social Change,* and
- *Tooling and Production.*

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.

With the recent hiring of a third tenured faculty, four full-time equivalent (FTE) faculty members currently have responsibility for the core curriculum in engineering technology. They are supported by three additional faculty members who teach courses in areas related to management and safety management. The safety management faculty member holds appropriate degrees and OSHA certifications. The number and qualifications of these faculty members have reduced the need to hire part-time instructors with master's degrees to teach lower-division courses in the program. There is currently no need for additional faculty members to support this 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 this program because nearly all resources already support the existing Sequence in Engineering Technology, including qualified faculty, facilities and equipment, as well as resources to support internships. It is expected that many more students will seek admission to this program when it is an autonomous degree program that is actively promoted. Success would generate more funds from tuition paid by students in the program. A conservative budget of the program is projected to grow from $322,799 in the first year to $357,000 in the fifth year. The funds will be used for personnel, including faculty, as well as supplies, services, and equipment.

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.

Currently there is no specialized accreditation for engineering technology programs. However, the Industrial Technology and the Engineering Technology Sequence which would be replaced by this program have been accredited by the Association of Technology, Management and Applied Engineering since 1989. While there is currently no plan to seek another specialized accreditation, approval of this program would provide the program with more flexibility to consider pursuing accreditation by the Accreditation Board of Engineering and Technology.

Illinois State University is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. This accreditation covers all degree programs offered by the University.

Program Information

1050.30 (b)(2)(A) The information the institution provides for students and the public…(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 Illinois State University's Bachelor of Science in Engineering Technology, including a detailed description of the curriculum, admission requirements, tuition, fees and other cost information, as well as university undergraduate policies, will be published on the University's website, www.ilstu.edu. Similar information about the program may be available from the College of Applied Science and Technology upon request.

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

The staff recommends adoption of the following resolutions:

The Illinois Board of Higher Education hereby grants to Eastern Illinois University authorization to establish the Master of Science in Sustainable Energy in the Prairie Region subject to the institution's implementation and maintenance of the conditions that were presented in its application and that form the basis upon which this authorization is granted.

The Illinois Board of Higher Education hereby grants to Illinois State University authorization to establish the Bachelor of Arts and Bachelor of Science in Legal Studies 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 Illinois State University authorization to establish the Bachelor of Science in Engineering Technology 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.