

# INDIANA COMMISSION for HIGHER EDUCATION

AGENDA

February 11, 2016

101 West Ohio Street, Suite 300 Indianapolis, IN 46204-4206 Phone: 317-464-4400 | Fax: 317-464-4410 **WWW.che.in.gov** 



**INDIANA COMMISSION** for HIGHER EDUCATION

# FEBRUARY COMMISSION MEETING AGENDA

Thursday, February 11, 2016

#### HOTEL ACCOMMODATIONS

TownePlace Suites Indianapolis Park 100 By Marriott 5802 West 71st Street Indianapolis, Indiana 46278

#### **COMMISSION MEETING**

Indiana University-Purdue University Indianapolis Campus Center (CE) 420 University Boulevard Indianapolis, IN 46202

#### **WORKING SESSION & BREAKFAST**

9:00 A.M. – 11:30 A.M. Campus Center (CE), Room 305

#### **CALL IN INFORMATION:**

DIAL: 1 (605) 475-4700 PIN: 230295#

# WiFi INFORMATION:

attwifi

#### WORKING SESSION TOPICS

- CHE Student Support Center
- Legislative Update
- You Can. Go Back. Initiative
- Student Aid Grid for 2016-2017
- WICHE Passport Initiative
- Committee Report Outs

#### **COMMISSION MEMBER LUNCH**

11:45 A.M. – 1:00 P.M. Campus Center (CE), Room 306

# Lunch Guest

Zeb Davenport Vice Chancellor for Student Affairs

#### COMMISSION STAFF LUNCH

11:45 A.M. – 1:00 P.M. Campus Center (CE), Room 307

#### **BUSINESS MEETING**

1:00 P.M. – 3:00 P.M. Campus Center (CE), Room 450C

#### **CALL IN INFORMATION:**

DIAL: 1 (605) 475-4700 PIN: 230295#

# WiFi INFORMATION:

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I.	Call to Order – 1:00 P.M. ( <i>Eastern</i> ) Roll Call of Members and Determination of Quorum Chair's Remarks Commissioner's Report Consideration of the Minutes of the December 10, 2015 Commission Meeting	1
П.	Public Square	
	A. You Can. Go Back. Employer Support	7
III.	Business Items	
	A. Resolution Encouraging Indiana's Employers to Partner on the You Can. Go Back. Initiative	9
	<ul> <li>B. Academic Degree Programs for Full Discussion</li> <li>1. Bachelor of Science in Mechanical Engineering and Bachelor of Science in Manufacturing Engineering to be offered by the University of Southern Indiana1</li> </ul>	
	<ul> <li>C. Academic Degree Programs for Expedited Action</li></ul>	

VI.	Ad	journment	
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		<ol> <li>Purdue University West Lafayette – Ross Ade Lease</li> </ol>	
		<ol><li>Indiana University Bloomington – Marching Hundred Hall</li></ol>	
		1. Ball State University – Emens Auditorium Lobby Renovation and Expansion	
	E.	Capital Projects for Expedited Action	65
		Indiana State University	
		1. College of Health and Human Services Renovation and Expansion –	
	D.	Capital Project for Full Discussion	55

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The next meeting of the Commission will be on March 10, 2016, in Indianapolis, Indiana.

#### State of Indiana Commission for Higher Education

#### **Minutes of Meeting**

#### Thursday, December 10, 2015

#### I. CALL TO ORDER

The Commission for Higher Education met in regular session starting at 1:00 p.m. at Ivy Tech Community College Corporate Culinary Center, 2820 N Meridian St, Indianapolis, IN, with Chairman Dennis Bland presiding.

#### **ROLL CALL OF MEMBERS AND DETERMINATION OF A QUORUM**

*Members Present:* Dennis Bland, John Conant, Sarah Correll, Jon Costas, Susana Duarte De Suarez, Jud Fisher, Lisa Hershman, Allan Hubbard, Chris Murphy, Dan Peterson, John Popp and Caren Whitehouse. *On the phone*: Gerald Bepko

Members Absent: Chris LaMothe

#### **CHAIR'S REPORT**

Chairman Bland began his report stating on behalf of the Commission, I would like to thank Ivy Tech Central for hosting our meeting today.

Last week the Commission in partnership with USA Funds hosted a first-of-its-kind Student Advocates Conference. Over 350 mentors, advisors and student advocates from around the state attended two days of informational sessions on how to better student success in our state. A follow-up evaluation and more information about these sessions can be found on the Commission's website. Mr. Bland recognized Ms. Correll for her participation and opening address on day one of the conference.

#### **COMMISSIONER'S REPORT**

Commissioner Lubbers began her report stating that with the end of the year approaching, we are working to conclude 2015 projects and prepare for the 2016 legislative session and the development of our updated strategic plan. While we don't meet in January, we will keep you up to date on those and other issues that arise prior to our February meeting.

Since we met in October, we have concluded our first Student Advocates Conference, a huge success with over 350 in attendance. The invitees were the people and organizations focused on increasing college success. Commissioner Lubbers built upon Chairman Bland's comments about the Student Advocates Conference and recognized Mr. Bland's participation in the conference. Ms. Correll was the lead for the first day of the two-day conference and Mr. Bland was the lead for the second day. We divided between the first day, looking at the work we do for students who are going straight from high school into college or the younger adult, the second day we focused our efforts on Return and Complete and the older adult and the need to get more of

them to succeed. We combined the celebration of the 25<sup>th</sup> Anniversary of the 21<sup>st</sup> Century Scholars program and recognized 25 alums, 10 organizations and awarded the Founders Awards to former Governor and U.S. Senator Evan Bayh and former commissioner of higher education, Stan Jones, as the leading advocates for the program at the time of its passage in the General Assembly. It was a great night and a fitting tribute to an extraordinary program that has now made it possible for more than 30,000 students to graduate from college.

Early this month, as one of 20 board members, I attended a meeting of the National Council for State Authorization Reciprocity Agreements. As you may recall, this is a voluntary initiative among member states to establish comparable standards for interstate offering of postsecondary distance education courses and programs. Indiana was the first state to join in February of 2014, and in less than two years there are now 36 states and 528 institutions that are participants in NC-SARA. The significance of this is far-reaching, saving students and institutions money while ensuring academic quality.

You may recall that when we adopted the recommendations for non-binding tuition targets in May of this year, the Commission also urged campuses currently charging tuition per credit hour to consider conversion to a banded tuition structure for full-time students. The rationale was that this will remove a key cost barrier that prevents full-time students from taking enough credits to graduate on time. Some of our institutions were already following this practice, but I'm pleased to let you know that additional campuses have since come on board. Campuses now charging, or soon to be charging, banded tuition include: IU Bloomington, IU East, IU Kokomo, IUPUI, IU Northwest, IU Southeast, IU South Bend, Ball State University, Indiana State University and Purdue West Lafayette. This is great progress for the schools and a significant benefit for their students.

Finally, I'd just like to acknowledge that Chuck Johnson, our friend who is often at our meetings and was the Interim President and former Provost of Vincennes University, has been officially named as the 22<sup>nd</sup> President of Vincennes University.

#### CONSIDERATION OF THE MINUTES OF THE OCTOBER, 2015 COMMISSION MEETING

**R-15-08.1 RESOLVED:** That the Commission for Higher Education hereby approves the Minutes of the October, 2015 regular meeting (Motion – Murphy, second – Hubbard, unanimously approved)

#### II. PUBLIC SQUARE

- A. Building Math Pathways to Programs of Study: An Overview of the Indiana Math Innovation Council Recommendations
  - 1. Jeffrey X. Watt, Ph.D., Professor and Associate Chair, Department of Mathematical Sciences, Indiana University-Purdue University Indianapolis
  - 2. Catherine Murphy, Ph.D., Professor and Head of Department of Mathematics, Computer Science and Statistics, Purdue University Calumet
  - 3. Liz Brown, Ph.D., Professor and Chair, Department of Mathematics and Computer Science, Indiana State University

Bland introduced members by stating that in 2014, Complete College America, in collaboration with the Charles Dana Center at the University of Texas-Austin, invited Indiana and five other states to participate in a two-year initiative to dramatically increase the percentage of students who pass gateway math courses and enter programs of study within one academic year by building math pathways. The Math Innovation Council is Indiana's task force for this initiative, charged with publishing and implementing recommendations for differentiated, program-aligned mathematics in support of student success. This project focused its first year on recommendations and will shortly pivot to implementation in the coming month. Today we have the opportunity to hear from three members of the Math Innovation Council on these efforts.

Dr. Sauer moderated the discussion.

#### III. BUSINESS ITEMS

#### A. ECS Blueprint: Indiana Policies Against the National Backdrop

1. Sarah Pingel, Policy Analyst, ECS

Ms. Pingel covered 15 policy issues regarding Indiana's Higher Education policy environment and discussed Indiana in terms of three main areas: college readiness, state financial aid and the 2015 legislative activity related to higher education.

#### B. Strengthening Indiana's Community College System: A Report in Response to House Enrolled Act 1001-2015

**R-15-08.2 RESOLVED:** That the Commission for Higher Education approves by consent the following recommendations, in accordance with the background information provided in this agenda item. (Motion – Fisher, second – Peterson, unanimously approved)

#### C. Update Commission Policy Regarding Associate Degrees

Ms. Lubbers stated that it was brought up that we include that this is our Return and Complete initiative which this policy is related to and sunsets in 2020. This would indicate a 2020 sunsetting of this policy.

**R-15-08.3 RESOLVED:** That the Commission for Higher Education approves by consent the following update to its policy, in accordance with the background information provided in this agenda item. (Motion – Murphy, second – Hubbard, unanimously approved)

#### D. Academic Degree Programs for Expedited Action

- 1. Bachelor of Arts and Bachelor of Science in Astronomy to be offered by Ball State University
- 2. Master of Arts in Post-Secondary Foundational Mathematics Teaching to be offered by Ball State University

**R-15-08.4 RESOLVED:** That the Commission for Higher Education approves by consent the following degree programs, in accordance with the background information provided in this agenda item. (Motion – Whitehouse, second – Correll, unanimously approved)

#### E. Capital Projects for Full Discussion

- 1. Hodge Hall, Kelley School of Business Career Services Addition Indiana University, Bloomington
- Dr. Tom Morrison presented this item.

Mr. Bland asked Dr. Morrison to discuss the need for this addition. Dr. Morrison stated that one of the things Indiana University strives for is what happens with our students as they prepare for graduation and after graduation. The Kelley School of Business does this better than anyone else and those students start in career services mode early on and prepare for what they will do upon graduation and summer internships. We have a parade of business coming to campus to interview students and have a segment of that building for that purpose. This will grow that opportunity and create new spaces in this new addition and will repurpose the other part of the building back to classrooms. This would be 35 to 50 interview rooms for representatives from businesses internationally and around the country. This will provide opportunity for students to learn everything from resume writing to interview skills.

Mr. Hawkins provided the staff recommendation.

**R-15-08.5 RESOLVED:** That the Commission for Higher Education approves by consent the following capital projects, in accordance with the background information provided in this agenda item. (Motion – Murphy, second – Whitehouse, unanimously approved)

#### F. Capital Projects for Expedited Action

- 1. Indiana University South Bend, Administrative Building and Riverside Hall Renovations
- 2. Purdue University West Lafayette, Marsteller Street Parking Garage Demolition and Parking Lot Installation
- **R-15-08.6 RESOLVED:** That the Commission for Higher Education approves by consent the following capital projects, in accordance with the background information provided in this agenda item. (Motion Peterson, second Hubbard, unanimously approved)

#### IV. INFORMATION ITEMS

- A. Academic Degree Programs Awaiting Action
- B. Academic Degree Program Actions Taken by Staff
- C. Capital Projects Awaiting Action

- D. Media Coverage
- E. Schedule of Upcoming Meetings of the Commission

#### V. NEW BUSINESS

There was none.

#### VI. OLD BUSINESS

There was none.

#### VII. ADJOURNMENT

The meeting was adjourned at 2:43 P.M.

Dennis Bland, Chair

Susana Duarte De Suarez, Secretary

#### COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

PUBLIC SQUARE:	You Can. Go Back. Employer Support		
Background	The You Can. Go Back. initiative (formerly known as Return and Complete) is has reached an important milestone: direct outreach to former students has begun. As the message hits Hoosier households, Commission staff are ramping up the next phase of the project—employer and community engagement. This month's Public Square will be a dialogue with a variety of employers about ways they encourage and support the		
	employers about ways they encourage and support the		

educational pursuits of their employees.

# COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM A:	<u>Resolution Encouraging Indiana's Employers to Partner on the</u> <u>You Can. Go Back. Initiative</u>
Staff Recommendation	That the Commission adopt a resolution calling on Indiana's employers to encourage and support the educational pursuits of employees in a variety of ways.
Background	The You Can. Go Back. initiative has always been approached as an Indiana project, not a Commission project. We have worked with colleges and universities to make it easier for adults to re- enroll in and complete college. We are reaching out directly to former students as called for by the Indiana General Assembly. Indiana's employers, its communities and its government agencies must also join in this effort if it is to meet the goal of 200,000 adults completing a degree or credential by 2020. This resolution will outline specific things employers can do to help meet this goal and strengthen the Hoosier workforce.
Supporting Document	To be distributed.

# COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM B:	Bachelor of Science in Mechanical Engineering and Bachelor of Science in Manufacturing Engineering to be offered by the University of Southern Indiana			
Staff Recommendation	That the Commission for Higher Education approve the B.S. in Mechanical Engineering and B.S. in Manufacturing Engineering both to be offered by the University of Southern Indiana in accordance with the background discussion in this agenda item and the Program Descriptions.			
Background	<b>Review Process.</b> These program proposals were discussed by the Academic Affairs and Quality (AA&Q) Committee at its January 19, 2016 meeting. Previous to this discussion, the AA&Q Committee, at its November 18, 2015 meeting, reviewed the University's overall plan to move from a single, general Engineering program to named programs in specific Engineering disciplines.			
	<u>Similar Programs in Indiana – Mechanical Engineering.</u> In the <u>independent</u> or private not-for-profit sector, there are five institutions (Indiana Institute of Technology, Rose-Hulman Institute of Technology, Trine University, University of Evansville, and Valparaiso University) that offer ABET-accredited Mechanical Engineering baccalaureate programs.			
	No institution in the <i>proprietary</i> or private for-profit sector offers a baccalaureate ABET- accredited Mechanical Engineering program.			
	Within the <i>public</i> sector, five institutions (IPFW, IUPUI, Purdue University West Lafayette, Purdue University Calumet, and Purdue University North Central) offer ABET- accredited Mechanical Engineering baccalaureate programs. In FY2015, these five programs enrolled a total of 2,918 headcount or 2,418 FTE students; these figures represent an increase, respectively, of 17.9% headcount or 22.0% FTE enrollment over the FY2013 enrollments. Together, the five programs graduated 585 students in FY2015, an increase of 148 graduates or 33.9% over the number of graduates in FY2013.			
	<u>Similar Programs in Indiana – Manufacturing Engineering.</u> No Indiana institution in the <u>independent, proprietary, or public</u>			

sectors offers an ABET-accredited Manufacturing Engineering program.

**Related Programs at USI**. The University of Southern Indiana offers a B.S. in Engineering (B.S.E.), which is a general engineering program that the Commission approved in May 2002. In FY2015, the B.S.E. enrolled 357 headcount or 293 FTE students and graduated 49 students. Students enrolled in the B.S.E. can choose from among five areas of emphasis: Civil, Electrical, Industrial, Mechanical, and Mechatronics.

USI also offers a related technology program, the B.S. in Advanced Manufacturing, which the Commission approved in March 2008. In FY2015, this program enrolled 41 headcount or 31 FTE students and had nine graduates. Unlike the B.S.E., Advanced Manufacturing is not accredited by ABET, the national accrediting body for engineering and engineering technology.

The existing Engineering and Advanced Manufacturing programs are housed in two facilities, the Business and Engineering Center and the Applied Engineering Center, both completed within the past six years. The proposed Mechanical and Manufacturing Engineering programs will also be housed in these facilities.

**Future Plans and Accreditation.** The University will seek accreditation from ABET for the two proposed programs. USI has also indicated that as the move from a general engineering program to named engineering programs continues, additional baccalaureate engineering programs could be proposed in the following disciplines: Biomedical, Civil, Electrical, and Industrial Engineering. At this point, the estimated timeframe for these programs coming before the Commission is three to seven years, or even longer, depending upon, among other things, enrollment trends, resource capabilities, and progress toward ABET accreditation.

As additional named engineering programs are brought forward, the Commission will ask the University to monitor the need for the existing B.S. in Engineering. The University has indicated that the current thinking is that the flexibility of the B.S.E. curriculum would be a desirable alternative for students not interested in pursuing a named or more standard program in an engineering discipline.

**Employer Demand and Letters of Support.** The demand for engineers in the current economy remains strong, and engineers with expertise related to the manufacturing sector

are especially valued in the workforce, given the importance of this sector to Indiana's economy. The University has provided letters of support from employers important to the economy of southwestern Indiana, including Vectren, Crane Naval Surface Warfare Center, Alcoa, and Toyota.

Standard Credit Hour Expectation and Articulation. The proposed Mechanical Engineering and Manufacturing Engineering programs both require 128 semester credit hours, which means they both exceed the standard credit hour expectation for baccalaureate degrees. However, the legislation in this area allows for exceptions due to accreditation, employer requirements, or program quality, all of which apply to these programs, as is true for engineering programs at other institutions.

A Transfer Single Articulation Pathway (TSAP) has been developed for Mechanical Engineering and will apply to USI's proposed B.S. in Mechanical Engineering. While no TSAP or articulation agreement has been developed as yet for the proposed Manufacturing Engineering program, it is expected that the USI program will articulate with programs at Ivy Tech and VU as further discussions take place around broadening associate degree pre-Engineering opportunities.

Supporting Documents

Program Description – B.S. in Mechanical Engineering and B.S. in Manufacturing Engineering

# **Program Description**

# Bachelor of Science in Mechanical Engineering To Be Offered by the Pott College of Science, Engineering, and Education University of Southern Indiana

#### 1. <u>Characteristics of the Program</u>

- a. Campus: USI, Evansville
- b. **Scope of delivery:** On-campus only
- c. Mode of delivery: Classroom/lab
- d. Other delivery aspects: Co-ops, Internships
- e. Academic unit offering program: Engineering Department in the Pott College of Science, Engineering, and Education

# 2. <u>Rationale for the Program</u>

# a. Institutional Rationale (Alignment with Institutional Mission and Strengths)

# • Why is the institution proposing this program?

- The objective is to establish a Bachelor of Science in Mechanical Engineering 0 (BSME) degree at the University of Southern Indiana (USI). USI currently offers a single ABET accredited engineering degree, the Bachelor of Science in Engineering (BSE). It is a practice-oriented, flexible program which includes a "core" set of required foundational courses in math, science, and engineering, but also allows students flexibility in choosing 30 hours of technical electives. Engineering courses in the BSE are taught by faculty across engineering disciplines who reside in a single academic department. To ensure students get appropriate breadth and depth, students choose electives based on an "emphasis" area among engineering disciplines: Mechanical, Electrical, Civil, Industrial, and Mechatronics. Typical Mechanical emphasis students choose an upper-level curriculum resembling that of BSME programs at other institutions. However, the emphasis name does not appear on the student diploma or transcript. Thus there is no formal distinction between these Mechanical emphasis graduates and other BSE graduates who opted for non-Mechanical upper-level electives. The addition of a BSME program would ensure students complete a rigorous curriculum including mechanical science and engineering design courses, and provide graduates with the formal recognition of this accomplishment on a diploma and transcript. The BSME degree program will begin in fall 2016.
- Since USI began offering the BSE in 2002, there has been a growing demand from engineering students and prospective engineering students for a named degree in Mechanical Engineering. The number of mechanical emphasis graduates from USI has increased from 10 in AY 2010 to 21 in AY 2015, more than doubling in only five years. The department regularly gets inquiries from potential students regarding

discipline-specific engineering degrees. In addition, employers are often looking for graduates with a BSME.

# • How is it consistent with the mission of the institution?

"Shaping the future through learning and innovation" is USI's vision statement, while its mission statement reads, "USI is an engaged learning community advancing education and knowledge, enhancing civic and cultural awareness, and fostering partnerships through comprehensive outreach programs. We prepare individuals to live wisely in a diverse and global community." A move to a BSME by USI would be consistent with both the vision and mission statements. Because a BSME is so universally recognized as a standard engineering degree, such a degree at USI would be consistent with "advancing education" and also better prepare our students for the "global community," again, where such a degree is highly regarded.

# • How does the program fit into the institution's strategic and/or academic plan?

- One of the goals of the USI Strategic Plan (see Appendix 1 for a link) is to "Provide Leadership to Indiana and the Region." One of the key strategies supporting this goal is to "Elevate our visibility to a level more appropriate to the University's accomplishments and impact in higher education and on the economy." The BSME is the most common engineering degree in the U.S. Thus, having the institution offer a BSME will noticeably elevate our visibility commensurate with the accomplishments of our graduates successfully completing such a degree.
- Another goal of the USI Strategic Plan is to "Enhance Experiential Learning 0 Opportunities." A key strategy supporting this goal is to increase internships and Coops. It is anticipated that internships and Co-ops will be more readily available to USI students pursuing the familiar BSME degree. Active student chapters of The American Society of Mechanical Engineers (ASME) and SAE International (the Society of Automotive Engineers) are already in place at USI and provide numerous "experiential learning opportunities" through, for example, the "Human Powered Vehicle" and "Baja SAE" competitions. "Experiential learning" is built into the BSME curriculum in the sense that many of the required courses will have a hands-on lab. Further, one of the new required classes in the BSME curriculum will be a course in Manufacturing. This course will give our students the opportunity to ensure that they are designing for manufacturability using much of the cutting edge equipment in the Department's new Applied Engineering Center, thus increasing their "experiential learning." Engineering students have accomplished internships and/or co-ops at a wide variety of regional firms. A listing of these firms is attached in Appendix 12.

#### • How does this program build upon the strengths of the institution?

Since 2002 USI has offered a Bachelor of Science in Engineering program that has graduated 264 students, 116 of whom have been from the mechanical emphasis area (43 percent). Currently, there are 330 students enrolled in USI's engineering program

and approximately 140 of them are mechanical emphasis students. The program requires students to choose one of five emphasis areas (Mechanical, Electrical, Civil, Industrial or Mechatronics) prior to the start of the final two years of their degree work. A typical curriculum taken by a USI Mechanical emphasis student is identical or nearly identical to that of a BSME program. Thus a move to a BSME program is building on the strong foundation of the curriculum, faculty and facilities that presently exist to support the BSE with the Mechanical emphasis.

#### **b.** State Rationale

- How does this program address state priorities as reflected in *Reaching Higher*, *Achieving More*?
  - This BSME program plan addresses numerous goals outlined in *Reaching Higher*, *Achieving More*. One goal is to "Prioritize...high-demand academic programs." The recently completed "Single Articulation Pathway – Mechanical Engineering" delineated common outcomes for articulation between two-year and four-year Indiana public institutions. USI participated in this discussion and is well-postured to accept two-year transfer students.
  - Because USI is already integrated into the "Single Articulation Pathway Mechanical Engineering" for public institutions in Indiana, this ensures that the new BSME will be aligned with the *Reaching Higher, Achieving More* goal of "seamless transfer between the state's two-year and four-year campuses...."
  - *Reaching Higher, Achieving More* speaks of the goal to "align the state's higher education system to meet Indiana's economic and workforce needs." As will be evident in part c. below, a BSME fits this goal extremely well.
  - Finally, as indicated in part a. above, the USI BSME degree will meet the *Reaching Higher, Achieving More* goal of, "Producing quality college degrees...that are valued by students and employers."

# c. Evidence of Labor Market Need

#### i. National, State or Regional Need

- Is the program serving a national, state, or regional labor market need?
  - Mechanical Engineering is the most popular degree among all of the engineering degrees, with over 21,000 degrees awarded nationally in the 2012-2013 academic cycle. (Yoder, B. "Engineering by the Numbers." Profiles of Engineering and Engineering Technology, 2013. Web. 18 May 2015.) The Bureau of Labor Statistics lists 258,100 Mechanical Engineering jobs nationally, as of 2012, with an anticipated five percent rate of growth over the subsequent decade.

- As of 2012, Indiana ranked seventh in the nation for Mechanical Engineering employment, with 10,360 positions. Also, "Mechanical Engineer" is presently listed 13<sup>th</sup> amongst Indiana's "Hot 50" jobs by the Department of Workforce Development (DWD).
- USI is located in Evansville, in southwest Indiana, with a large number of manufacturers that have been hiring USI's BSE, Mechanical emphasis, graduates. In addition, the Naval Surface War Center, Crane has employed USI engineering graduates, and the emerging "I-69 innovation corridor," is expected to add to the numbers. In southwest Indiana, steady growth (9.1 percent) is expected in Mechanical Engineering employment according to the Indiana DWD.

# ii. Preparation for Graduate Programs or Other Benefits

- Does the program prepare students for graduate programs or provide other benefits to students besides preparation for entry into the labor market?
  - The proposed Bachelor of Science in Mechanical Engineering degree will prepare students to gain admission for advanced degrees, including a Master of Science in Mechanical Engineering. It also is worth noting that students seeking a graduate degree will have a convenient option of studying in-state at Purdue University, given Purdue's graduate school affordability (\$10,322 per year for in-state students).

# iii. Summary of Indiana DWD and/or U.S. Department of Labor Data (supporting data provided in Appendix 2)

- Summarize the evidence of labor market demand for graduates of the program as gleaned from employment projections made by the Indiana Department of Workforce Development and/or the U.S. Department of Labor.
  - The Bureau of Labor and Statistics indicates a 5% growth in Mechanical Engineering positions nationally. This translates to over 11,000 jobs in the 2012-2022 year span.
  - Indiana is poised to capture many of these jobs. Indiana has the seventh highest availability of Mechanical Engineering jobs in the U.S. These jobs range from manufacturing and design of automotive and aerospace parts to scientific research and development services. Indiana also has the third highest percentage engineering positions for every 1,000 jobs available.
  - The demand for Mechanical Engineers in this region of Indiana (EGR11) is growing at over double the rate when compared to the state of Indiana as a whole (supporting data provided in Appendix 2).

- iv. National, State, or Regional Studies
  - Summarize any national, state, or regional studies that address the labor market need for the program. (Supporting data given in Appendix 3)
    - A study by the Congressional Research Service, "The U.S. Science and Engineering Workforce: Recent, Current, and Projected Employment, Wages, and Unemployment," dated February 19, 2014, estimates the U.S. annual average number of job openings (job growth plus net replacements) for mechanical engineers will be 9,970 between 2012 - 2022.

# v. Surveys of Employers or Students and Analyses of Job Postings

- Summarize the results of any surveys of employers or students and analyses of job postings relevant to the program. (Supporting data provided in Appendix 4)
  - A search on Engineerjobs.com shows almost 20,000 jobs available in the United States are categorized as Mechanical Engineering (as of May 10, 2015).
     Approximately 22 percent of those jobs are located in Indiana or its neighboring states. Within Indiana, Illinois and Kentucky are 1,500 of those jobs, and, in Indiana alone, there are currently 481 Mechanical Engineering jobs available.

# vi. Letters of Support

# • Summarize, by source, the letters received in support of the program. (Letters attached in Appendix 5)

• A variety of support letters have been received in support of discipline specific engineering programs at the University of Southern Indiana:

Hon. Larry Bucshon, M.D., U.S. House of Representatives

Hon. Sue Ellspermann, Ph.D., Lt. Governor of Indiana

Hon. Vaneta Becker, State Senator, Indiana

Hon. Mark Messmer, State Senator, Indiana

Hon. Jim Tomes, State Senator, Indiana

Hon. Wendy McNamara, State Representative, Indiana

Hon. Thomas W. Washburne, State Representative, Indiana

Hon. Mike Braun, State Representative, Indiana

Hon. Lloyd Winnecke, Mayor, City of Evansville

Hon. Brad Ellsworth, President, Vectren Energy Delivery South

Evansville Vanderburgh School Corporation, Mr. Victor L. Chamness, Director of Science, Health, PE, and Digital Resources

Ivy Tech Community College, Hon. Jonathan Weinzapfel, Chancellor, Southwest/Wabash Valley

Crane Naval Surface Warfare Center, Brian D. Blackwell, Director of Engagement

Alcoa, Joseph E. Motz, Engineering Manager, Alcoa Warrick Operations

Toyota, Dan Potje, Vice President, Toyota Motor Manufacturing, Indiana

Three i Design, Bruce W. Woodruff, P.E., Senior Principal

Warehouse Services, Incorporated, Barry E. Cox, President and COO

# 3. Cost of and Support for the Program

- a. Costs
  - i. Faculty and Staff
    - Of the faculty and staff required to offer this program, how many are in place now and how many will need to be added (express both in terms of number of full- and part-time faculty and staff, as well as FTE faculty and staff)?
      - Currently the BSE curriculum is taught by a number of engineering faculty across the engineering disciplines, with the math and science courses taught by faculty in the respective departments. A roster of current faculty can be seen in Appendix 6.
      - It is expected that the offering of a BSME degree at USI will result in enrollment increases at USI and in Engineering. Two additional full-time tenured/tenure-track engineering faculty members will be required to maintain 12-hour teaching loads per semester for all faculty, which is typical for faculty in the College. As the program grows, additional faculty may be required in not only engineering, but also in mathematics and the sciences for support courses.
      - No additional staff support will be required beyond that existing in the Engineering Department.

• Funding for faculty lines would come from engineering program fees and increased tuition revenues due to program growth. It also is possible that some funding could come from reallocation of resources internal to the University.

# ii. Facilities

- Summarize any impact offering this program will have on renovations of existing facilities, requests for new capital projects (including reference to the institution's capital plan), or the leasing of new space.
  - The proposed Mechanical Engineering program will fall under the umbrella of the Engineering Department within the Pott College of Science, Engineering, and Education. The University of Southern Indiana has invested in modern facilities to support the existing Bachelor of Science in Engineering, Advanced Manufacturing, and Industrial Supervision programs which also are administered from the Engineering Department. These include classroom and laboratory spaces within the \$31.9 million Business and Engineering Center (BEC) which was completed in 2010 and the \$3.3 million Applied Engineering Center (AEC), which opened in 2013. The proposed Mechanical Engineering program will be housed primarily in the BEC. This 122,210 square foot building houses faculty offices, classrooms and laboratories for both the Department of Engineering and the College of Business. Additionally, some of the courses and research activities of the proposed Mechanical Engineering program will take place in the 16,000 square foot AEC, which includes state of the art manufacturing equipment.
  - The Mechanical Engineering program will share these facilities with the current program, thus no additional funding is required. Upgrade and maintenance costs will be covered through normal budgetary procedures by the Engineering Department and the Pott College of Science, Engineering, and Education.
  - Appendix 7 lists existing laboratory facilities within the BEC and equipment available in the AEC.

# iii. Other Capital Costs (e.g. Equipment)

- Summarize any impact offering this program will have on other capital costs, including purchase of equipment needed for the program. (Appendix 8)
  - This program does not require capital costs or new equipment beyond that described in the previous section.

# b. Support

- i. Nature of Support (New, Existing, or Reallocated)
  - Summarize what reallocation of resources has taken place to support this program.

- The proposed Mechanical Engineering degree program uses current courses taught in existing programs within the University. Primarily these are engineering core and elective courses which support the Bachelor of Science in Engineering. However, the anticipated increase in enrollment will require an additional two full-time tenured/tenure-track engineering faculty lines.
- What programs, if any, have been eliminated or downsized in order to provide resources for this program?
  - No programs have been eliminated to provide resources for this program.

# ii. Special Fees above Baseline Tuition

- Summarize any special fees above baseline tuition that are needed to support this program.
  - Some of the courses that will be part of the Mechanical Engineering degree program currently have lab fees between \$35 and \$200 that are assessed per student. In addition, 200-400 level engineering courses have a \$75/credit hour program fee. No new fees are being proposed for this program at this time.

# 4. Similar and Related Programs

# a. List of Programs and Degrees Conferred

- i. Similar Programs at Other Institutions
  - Campuses offering (on-campus or distance education) programs that are similar:
    - The following institutions have ABET accredited Mechanical Engineering programs in Indiana:
      - Indiana Institute of Technology [Fort Wayne]
      - Indiana University Purdue University Indianapolis (IUPUI)
      - Indiana University Purdue University Fort Wayne
      - Purdue University at West Lafayette
      - Purdue University Calumet [Hammond]
      - Purdue University North Central [Westville]
      - Rose-Hulman Institute of Technology [Terre Haute]
      - Trine University [Angola]
      - University of Evansville
      - University of Notre Dame [South Bend]
      - Valparaiso University
    - Of these above, four were first accredited prior to 1970; six were first accredited between 1970 and 1996 inclusive, while only one received first accreditation after

1996. Anderson University began a Mechanical Engineering program in fall 2013, and is not yet accredited.

- Marian University [Indianapolis] offers a five-year dual degree, a Bachelor of Science in Mathematics from Marian University and a Bachelor of Science in Mechanical Engineering from IUPUI. Similarly Franklin College offers a five-year dual degree, a Bachelor of Arts degree in Applied Mathematics and a Bachelor of Science degree in Mechanical Engineering from IUPUI.
- Therefore, Indianapolis is the location nearest to Evansville at which an accredited Bachelor of Science degree in Mechanical Engineering is offered at a public university in Indiana.

# ii. Related Programs at the Proposing Institution

• Bachelor of Science in Engineering

# b. List of Similar Programs Outside of Indiana

- If relevant, institutions outside Indiana (in contiguous states, MHEC states, or the nation, depending upon the nature of the proposed program) offering (on-campus or distance education) programs that are similar:
  - The following institutions have ABET accredited Mechanical Engineering programs in Kentucky:
    - University of Kentucky [Lexington]
    - University of Kentucky (Extended Campus Paducah)
    - University of Louisville
    - Western Kentucky University [Bowling Green]
  - The following institutions have ABET accredited Mechanical Engineering programs in Illinois:
    - Bradley University [Peoria]
    - Illinois Institute of Technology [Chicago]
    - Northern Illinois University [Dekalb]
    - Northwestern University [Evanston]
    - Southern Illinois University Carbondale
    - Southern Illinois University Edwardsville
    - University of Illinois Chicago
    - University of Illinois Urbana Champaign

#### c. Articulation of Associates/Baccalaureate Programs

- For each articulation agreement, indicate how many of the associate degree credits will transfer and apply toward the baccalaureate program.
  - The USI Bachelor of Science in Engineering degree is already part of the recently completed "Single Articulation Pathway Mechanical Engineering" which provides for articulation from two-year public institutions to four public institutions in Indiana. The articulation agreement provides that all of the institutions, two-year and four-year, have student competencies and learning outcomes aligned with a Statewide Mechanical Engineering core for the first two years of their respective programs. Thus all the associate degree credits (60 65 credit hours) will transfer from the two-year institution to USI's BSME program. The single articulation pathway is available for review in Appendix 9.

# d. Collaboration with Similar or Related Programs on Other Campuses

- Indicate any collaborative arrangements in place to support the program.
  - Currently, there are no collaborations planned with similar or related programs on other campuses.

#### 5. <u>Quality and Other Aspects of the Program</u>

# a. Credit Hours Required/Time To Completion

- Credit hours required for the program and how long a full-time student will need to complete the program.
  - The BSME program will require 128 credit hours for Calculus ready students. A fulltime student can complete such a program in the traditional eight academic semesters over four years. A four-year plan for a typical BSME student is given in Appendix 10.

#### b. Exceeding the Standard Expectation of Credit Hours

- If the associate or baccalaureate degree program exceeds 60 or 120 semester hours, respectively, summarize the reason for exceeding this standard expectation.
  - It is estimated that this program will require 128 credit hours for Calculus-ready students to complete; this is consistent with other BSME programs in Indiana and with USI's existing BSE. The additional credit hours over 120 are required to meet ABET accreditation standards. A link to the ABET standards is provided in Appendix 11.

#### c. Program Competencies or Learning Outcomes

# • List the significant competencies or learning outcomes that students completing this program are expected to master.

- Student learning outcomes come directly from ABET Criterion 3. Student Outcomes (a k). These student outcomes describe what students are expected to know and be able to do by the time of graduation:
  - (a) an ability to apply knowledge of mathematics, science, and engineering
  - (b) an ability to design and conduct experiments, as well as to analyze and interpret data
  - (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
  - (d) an ability to function on multidisciplinary teams
  - (e) an ability to identify, formulate, and solve engineering problems
  - (f) an understanding of professional and ethical responsibility
  - (g) an ability to communicate effectively
  - (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
  - (i) a recognition of the need for, and an ability to engage in life-long learning
  - (j) a knowledge of contemporary issues
  - (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- In addition, ABET has the following criterion for the curriculum of a Mechanical Engineering program:
  - The curriculum must require students to apply principles of engineering, basic science, and mathematics (including multivariate calculus and differential equations); to model, analyze, design, and realize physical systems, components or processes; and prepare students to work professionally in either thermal or mechanical systems while requiring topics in each area.

#### d. Assessment

# • Summarize how the institution intends to assess students with respect to mastery of program competencies or learning outcomes.

• The Engineering Department has long-standing assessment techniques for the existing BSE program to meet the ABET accreditation. This assessment includes the identification of courses which meet the ABET program outcomes and includes a staggered schedule of collecting assessment data that allows for at least two reviews in each six-year ABET cycle. The classes that are used for assessment are all a part of the proposed program, and therefore the assessment methods, techniques and cycle will be used for this program.

• The additional Mechanical Engineering criterion listed above will be assessed in these four Mechanical Engineering courses:

ME 364 - Materials Science

- ME 365 Modeling Dynamic Systems
- ME 366 Dynamics of Machinery
- ME 463 Heat Transfer

#### e. Licensure and Certification

# Graduates of this program will be prepared to earn the following:

# • State License:

- Graduates of the program will be prepared to earn a professional engineering license in the State of Indiana. Based on Indiana Code 25-31-1-12, qualifications for professional registration include graduation from an "approved engineering curriculum;" four years of progressive engineering experience; and successful completion of the Fundamentals of Engineering (FE) and Principles of Practice of Engineering (PE) exams. With ABET accreditation, the program would be an "approved engineering curriculum" and thus all graduates satisfy the first requirement. Further, students in the final term of the program will be expected to take the FE exam. When successful, they would immediately qualify for certification as an Engineering Intern.
- National Professional Certifications (including bodies issuing the certification):
  - o None
- Third-Party Industry Certifications (including the bodies issuing the certifications):
  - o None

#### f. Placement of Graduates

- Please describe the principal occupations and industries in which the majority of graduates are expected to find employment.
  - Most of our graduates are expected to work as Mechanical Engineers in engineering or manufacturing firms. In addition, our graduates also may obtain jobs in the fields of Aerospace Engineering, Petroleum Engineering, Polymer Engineering, and/or Engineering Management.
- If the program is primarily a feeder for graduate programs please describe the principal kinds of graduate programs in which the majority of graduates are expected to be admitted.
  - The program is not primarily a feeder for graduate programs.

# g. Accreditation

- Accrediting body from which accreditation will be sought and the timetable for achieving accreditation.
  - o ABET
  - It is anticipated that accreditation of the BSME program will be sought in 2018 after we have produced our first program graduates.

# • Reason for seeking accreditation.

• ABET accreditation provides international recognition of the quality of the program, and in particular allows prospective students to realize the quality of the education they will receive. ABET accreditation also allows employers to understand that the graduating students are prepared for their profession. Licensing bodies and registration and certification boards often require graduation from an ABETaccredited program as a minimum qualification. Finally, the ABET accreditation process gives programs structured mechanisms to assess, evaluate and improve their educational practices.

# 6. <u>Projected Headcount and FTE Enrollments and Degrees Conferred</u>

Enrollment Projections	Year 1	Year 2	Year 3	Year 4	Year 5
Full-Time	128	132	135	136	140
Part-Time	5	5	7	10	10
Enrollment Projections (FTE)	131	135	138	139	144
Full-Time	128	132	135	136	140
Part-Time	3	3	3	3	4
Degrees Conferred Projections	10	22	23	24	25

• Report headcount and FTE enrollment and degrees conferred data in a manner consistent with the Commission's Student Information System

- Report a table for each campus or off-campus location at which the program will be offered.
  - All BSME courses will be delivered on the USI campus.

- If the program is offered at more than one campus or off-campus location, a summary table, which reports the total headcount and FTE enrollments and degrees conferred across all locations, should be provided.
  - Not applicable.
- Round the FTE enrollments to the nearest whole number.
  - See the above table.
- If the program will take more than five years to be fully implemented and to reach steady state, report additional years of projections.
  - Not applicable.

# Appendix 2: Summary of Indiana DWD and/or U.S. Department of Labor Data, Detail

Data from the Bureau of Labor Statistics: Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2014-15 Edition, Mechanical Engineers, on the Internet at <u>http://www.bls.gov/ooh/architecture-and-engineering/mechanical-engineers.htm</u> (visited May 19, 2015).

Mechanical Engineers					
2012 Median Pay	\$80,580 per year				
Entry-Level Education	Bachelor's degree				
Work Experience in a Related Occupation	None				
On-the-job Training	None				
Number of Jobs, 2012	258,100				
Job Outlook, 2012-22	5%				
Employment Change, 2012-22	11,600				

Source of the table below: Results from a Bureau of Labor Statistics Occupational Employment Statistics Query for Mechanical Engineers.

• States with top seven Mechanical Engineering Employment Levels by total numbers of mechanical engineers

State	Employment	Employment per 1000 jobs	Location quotient	Hourly mean wage	Annual mean wage
Michigan	38,700	9.501	4.74	\$42.66	\$88,730
California	24,030	1.589	0.79	\$47.77	\$99,360
Texas	20,330	1.81	0.9	\$47.63	\$99,080
Ohio	12,200	2.345	1.17	\$35.83	\$74,520
Illinois	11,790	2.044	1.02	\$40.59	\$84,420
Pennsylvania	10,480	1.854	0.93	\$39.86	\$82,900
Indiana	10,360	<u>3.567</u>	<u>1.78</u>	\$35.72	\$74,300

Source for information below: Results from a Bureau of Labor Statistics Occupational Employment Statistics Query for Mechanical Engineers.

- Third in Employment per 1,000 jobs and Local Quotient
  - Employment per thousand jobs
    - 9.501 (Michigan)
    - 3.673 (Connecticut)
    - 3.567 (Indiana)

16

# • Local Quotient

- 4.74 (Michigan)
- 1.83 (Connecticut)
- 1.78 (Indiana)

Source for information below:

Long-Term Occupational Projections: Indiana and Economic Growth Region 11 (ERG 11

 which includes Evansville) in 2020
 <u>http://www.hoosierdata.in.gov/dpage.asp?id=39&view\_number=2&menu\_level=&panel</u>\_number=2

Title	Base Yr. Emp.	Proj. Yr. Emp.	% Change	Annual Avg. Openings	Annual Avg. Replacement Jobs	Annual Avg. New Jobs
Engineers (EGR 11)	28,828 (2,137)	31,088 (2,341)	7.8 (9.5)	959 (74)	726 (53)	233 (21)
Mechanical Engineers (EGR11)	7,766 (453)	8,103 (494)	4.3 (9.1)	284 (19)	250 (15)	34 (4)



Vectren Corporation One Vectren Square Evansville, IN 47708

September 14, 2015

Theresa Lubbers Indiana Commission for Higher Education 101 West Ohio Street, Suite 300 Indianapolis, IN 46204-4206

Commissioner Lubbers:

I am writing this letter in support of the two new engineering programs proposed by the University of Southern Indiana; the Bachelor of Science degrees in Mechanical Engineering and in Manufacturing Engineering. Since the engineering program at USI produced its first graduates in 2005, over 250 engineers have entered the workforce and most of them have stayed in Indiana. This has had a tremendous positive economic impact not only on the southwest region of the state, but on Indiana as a whole.

At Vectren, we are always in need of quality engineers and USI has done a great job of providing them. We have hired graduates from the current Bachelor of Science in Engineering program in both the mechanical and electrical emphasis areas. These graduates have been valued contributors to our company. The establishment of these programs will help meet the needs of Hoosier students and help meet the needs of engineering and manufacturing firms in the southwest region and throughout our state.

As a USI alumnus, I am very proud of how the engineering program has blossomed since its inception in 2002. The offering of discipline specific degrees will allow this program to serve our state to its fullest potential.

Thank you,

Brad Elloworth

Brad Ellsworth President, Vectren Energy Delivery-South



DEPARTMENT OF THE NAVY CRANE DIVISION NAVAL SURFACE WARFARE CENTER 300 HIGHWAY 361 CRANE INDIANA 47522-5001

May 27, 2015

Dr. Zane Mitchell Chair, Department of Engineering University of Southern Indiana 8600 University Blvd Evansville, IN 47712

Dear Dr. Mitchell,

The Naval Surface Warfare Center, Crane Division (NSWC Crane) and the University of Southern Indiana (USI) has each played an important role in the development of human capital in key technology fields within southwest Indiana. Our recent discussion regarding your intent to expand USI's engineering offerings is encouraging toward this end. Efforts such as this will expand access to vital engineering and technology education throughout our region.

As you know, NSWC Crane's workforce is essential to our success. Expanded educational opportunities delivered locally will allow our current employees to more easily continue their educational pursuits in relevant technology fields. Moreover, this initiative will be a key contributor to the necessary pipeline of future public and private sector defense employees in our region. This growing defense sector currently employs more than 6,000 people in our region. The additional degree programs proposed are highly relevant to our region.

NSWC Crane's contributions to the Nation's defense in the areas of Strategic Missions, Special Missions and Electronic Warfare are not possible without strong ties to academic institutions and a vibrant industry base. This type of educational effort with a goal toward strengthening the technological capacity along our new "I-69 Innovation Corridor" better positions NSWC Crane to accomplish this important mission.

BRIAN D. BLACKWELL

Director of Engagement NSWC Crane Division



Alcoa U.S. Primary-Metals

Warrick Operations State Route 66 PO Box 10 Newburgh, IN 47629-0010 USA

Tuesday, July 28, 2015

To: Indiana Commission for Higher Education,

I have been very impressed with the progress the USI Engineering program has made the past several years. There are many reasons why I believe the future of its Engineering program is heading in the right direction, here are some examples:

First, I been very pleased with the performance of the engineering graduates I have hired from USI. On average, the quality of both USI engineering interns and full-time engineering graduates is equal or better than students from other Indiana engineering schools. Many of these students held part-time jobs while attending school and were able to show a strong work-life balance early on.

Next, the partnership between Alcoa and USI is second to none. I have represented Alcoa on the USI Engineering Advisory Board for many years. I have seen the partnership grow and develop. I have built a relationship with the USI engineering staff. I know the professors. They have visited Alcoa. I have visited their classrooms. They ask for feedback on curriculum and how to better prepare their graduates for life in the workplace. I believe USI's engineering staff sincerely strives to continuously improve and these types of partnerships with industry are an example of how to do exactly that.

I am especially excited about these new discipline specific programs. Mechanical and Electrical Engineering are important to Alcoa because many of the engineers we hire here are either ME or EE. There is always a demand for mechanical and electrical engineers, not just at Alcoa but throughout industry. Next, the Manufacturing Engineering program would be an excellent fit for us as well, considering we are a large manufacturing facility. Plus, USI's Manufacturing program would be the only of its type in the state of Indiana. With the upcoming completion of the I-69 corridor, there is an increased need of engineers graduating from the Civil Engineering program here in Indiana. Lastly, considering the strong future demand for jobs in the field of medicine globally, the Biomedical program would be an excellent source of local talented graduates in this discipline. It would also create synergy with the new IU Medical School Evansville Campus.

Many USI graduates earn jobs in the southwest Indiana area. Therefore they make a strong regional economic impact. Approval of these new programs would directly benefit Hoosier students, considering 90% of USI's enrollees are from Indiana. Furthermore, existing USI facilities could be utilized to start these new programs so no new buildings would be required.

In summary, these proposed engineering discipline specific programs have many benefits to local industry and to Hoosiers. These programs are highly recommended and have my full support. If you have any questions, feel free to contact me via email or phone.

Regards,

Jough F. Mot

Joseph E. Motz Engineering Manager - Alcoa Warrick Operations Joseph.motz@alcoa.com (812) 853-4925

# ΤΟΥΟΤΑ

Toyota Motor Manufacturing, Indiana, Inc. 4000 S. Tulip Tree Drive Princeton, IN 47670 812-387-2000

June 9, 2015

Indiana Commission for Higher Education 101 West Ohio Street, Suite 300 Indianapolis, IN 46204-4206

To Whom It May Concern:

On behalf of Toyota Motor Manufacturing, Indiana, I am pleased to add our support to the University of Southern Indiana's proposal for a discipline-specific engineering degree program to complement its Bachelor of Science in Engineering.

The USI proposal calls for specific engineering degrees in mechanical, biomedical, electrical, industrial, civil and manufacturing. Manufacturing engineering would be the only such program in the state. As a major auto assembly operation, Toyota Indiana requires considerable engineering support from an array of disciplines that this new program would provide.

USI has been an important partner to Toyota. We currently employ 42 USI graduates among our professional and administrative staffs. Since 2012, we have had nine USI students participate in our co-op program, including six in engineering. This demonstrates one of USI's strengths – providing graduates to Southwestern Indiana employers to strengthen the region's overall economic clout.

It's encouraging to see that USI intends to seek ABET accreditation for all six programs, and will be able to implement them with no new construction required.

Thank you for this opportunity to express our support for USI's continued growth.

Sincerely, Non

Vice President



THREE I DESIGN ENGINEERING + ARCHITECTURE

May 26, 2015

#### **Indiana Commission for Higher Education**

101 West Ohio Street, Suite 300 Indianapolis, IN 46204-4206

> Re: Engineering Program Expansion University of Southern Indiana Letter of Support

Dear Sir/Madam,

As a Senior Principal and licensed Professional Engineer for **Three i Design**, one of the leading engineering consulting firms in southern Indiana, and proud alumnus of the University of Southern Indiana, I submit this letter of support for the proposed expansion of USI's engineering program.

The University of Southern Indiana currently offers a Bachelor of Science in Engineering degree and is seeking to expand the program to include full degrees in Mechanical, Electrical, Civil, Industrial, Manufacturing, and Biomedical Engineering over the next 2-4 years. This proposal is a natural progression for USI as it continues to expand and broaden its range of programs and four year degrees.

Now is the time for this expansion for several reasons:

- The current engineering program has grown from six (6) graduates in 2004-05 to over 50 graduates this past academic year. It is clear that the program is filling an educational void in the region.
- The Manufacturing Engineering program would be the only program offered in the state, which will directly benefit the region's strong manufacturing industries.
- The Biomedical Engineering program could create great synergies with the new IU Medical School Evansville Campus.
- Based on Three i Design's past experience with USI graduate engineers, USI produces quality
  candidates that have the technical and fundamental background to immediately contribute
  to their employers. These new programs will continue to enhance and diversify the pool of
  employable candidates in the area.
- Specific engineering degrees will further benefit the student with job candidacy and placement locally and nationally.

Page 2 of 2

We continue to be impressed at Three i Design with the quality of candidates coming from the USI engineering program. Currently, we have fifteen (15) USI graduates on our staff of 76. Furthermore, half of our managing principals are USI alum as we approach our 40<sup>th</sup> year of operation next year and embark upon our third generation of managing partners. Many of our top clients such as Vectren, Mead Johnson Nutrition, Bristol-Myers Squibb, Sabic, Toyota, and the local hospitals also employ engineers from USI, many in upper management positions. With such a strong USI alumni base locally, this is a true testament to the quality of engineers that USI sends out into the workforce.

As a 1986 graduate with a degree in Mechanical Engineering Technology, I am proud to say that I am a USI alum. I feel I received the best hands on education and training I could get in the area and have always had confidence in my engineering abilities and expertise. I truly feel that if I had not received my education from USI, I would not be in the position I am in today as a Senior Principal at Three i Design nearly 30 years later.

The technical workforce and needs of industry is never static and always in a state of flux with emerging technologies and the ever changing global climate. We, as engineers, must constantly challenge ourselves to think outside the box and be receptive to change. So to, must universities challenge students to ever changing curriculum to keep pace with the needs of industry and technology. USI's engineering program continues to lead the way in innovative studies and curriculum such that program expansion is not only needed but required in order to remain competitive and continue to produce quality graduates.

Sincerely,

Bunca W. Woodruff Bruce W. Woodruff, P. E.

Sr. Principal Three i Design



WAREHOUSE SERVICES, INCORPORATED

2101 Highway 69 South • P.O. Box 608 • Mt. Vernon, Indiana 47620

May 27, 2015

Indiana Commission for Higher Education 101 West Ohio Street, Suite 300 Indianapolis, IN 46204-4206

To Whom it May Concern,

We are writing in support of the rapidly growing Engineering program at the University of Southern Indiana (USI). In 2005 this program graduated 5 students, this year the program will graduate over 50 students. With the addition of the Business & Engineering Center in 2010 and the Applied Engineering Center in 2013 the campus now has the assets to support the growth of a program enriching southern Indiana.

The southwest corner of our state has numerous businesses which require the assets of engineering graduates that will remain in our area. Some of these businesses are;

•	Toyota Manufacturing	Mead Johnson
٠	Alcoa Aluminum	SABIC Innovative Plastics
•	Berry Plastics	Vectren
٠	A. Schulman	Accuride
٠	Valero – Ethanol Production	CountryMark Refinery
٠	Abengoa – Ethanol Production	PGW Glass Works

Ninety percent of the engineering students at USI are from Indiana, therefore directly benefitting Indiana when they chose to remain employed in our region post-graduation. Development of programs in the following area will provide additional focus for students desiring to earn the living in the engineering field.

•	<b>Biomedical Engineering</b>	Industrial Engineering
•	Electrical Engineering	Mechanical Engineering
-	Civil Engineering	Manufasturing Engineering

Civil Engineering Manufacturing Engineering

The Manufacturing engineering program will take advantage of the new Applied Engineering Center and will be unique to the State of Indiana. The Biomedical program should nicely complement the new IU Evansville Medical campus.

With the completion of I-69 the southwestern part of the state will become more closely connected with the remainder of Indiana, generating additional commerce for our state. Development of new engineering programs at USI will provide a further foundation for the growth of Indiana. We ask for your support for the development of these programs.

Sincerely

Barry E. Cox President & COO

Telephone • Executive Offices (864) 422-9955 • Operating Headquarters (812) 831-4053

#### Appendix 12: Listing of regional firms for co-ops/internships

Accuride **ADCO Products** A-FAB Corp. A-K Steel Alcoa American Electric Power **ARC** Construction Arc Industries **B&W Nuclear Power Group** Bernardin Lochmueller **Berry Plastics Bowen Engineering** Bristol Myers Squibb Company ChemGroup City of Evansville Clark Dietz Associates Consolidated Grain and Barge **Control Specialists** Cook Medical Crane Environmental Services, LLC **Dana** Corporation **Dubois County** Duke Energy Easter Seals **ECS Engineering Solutions** Edmund J. Hafer Associates **Electronics Research Evana Automation Evansville Metal Products** Flanders Electric Frontier Kemper Contractors **GAF** Materials **GE** Plastics Gohmann Contractors Guardian Automotive Haier Hansen Corporation Hanson Testing and Engineering Hurst Manufacturing Indiana Furniture, Inc

Indiana Tube Corporation Indianapolis Power & Light Irving Materials, Inc. Jim Morley and Associates Kentucky Data Link **Kimball Electronics** Masterbrand Cabinets Mead Johnson Nutritionals NASA Glenn Research Center Nidec **NSWC** Crane PCI Skanska Peabody Coal Co. Pittsburg Tank and Tower Plymouth Engineered Shapes **PPG** Industries PPMI. Inc. Professional Consultants, Inc. InGen, Inc. **Project Associates Ragle Contractors** Rayloc, Inc. **Red Spot Paint Rexam Closures River Town Construction Ryan's Excavating** SAIC Shamrock Engineering Silgan Closures Spencer County Highway Department Sterling Boiler Superior Concrete T. J. Maxx Three I Engineering Toyota (TMMI) **Traylor Brothers Construction** USI Center for Bone and Joint Care Vectren Corporation Volkswagen of America Whirlpool Corporation Wilderman and Associates

#### **Program Description**

## Bachelor of Science in Manufacturing Engineering To Be Offered by the Pott College of Science, Engineering, and Education University of Southern Indiana

#### 1. <u>Characteristics of the program</u>

- a. Campus: USI, Evansville
- b. **Scope of delivery:** On-campus only
- c. Mode of delivery: Classroom/lab
- d. Other delivery aspects: Co-ops, Internships
- e. Academic unit offering program: Engineering Department, Pott College of Science, Engineering, and Education

## 2. <u>Rationale for the Program</u>

#### a. Institutional Rationale: (Alignment with Institutional Mission and Strengths)

## • Why is the institution proposing this program?

A Bachelor of Science in Manufacturing Engineering (BSMfgE) degree program is a logical extension and fit for the current Bachelor of Science in Engineering (BSE) program being offered since 2002 by the Department of Engineering. The program will allow USI engineering students to specialize in manufacturing engineering. Manufacturing is increasing in Indiana according to the December 2014 Department of Workforce Development report and a degree in Manufacturing Engineering would help students obtain jobs. This will enhance Indiana's economic competitiveness by producing a specialized workforce with increased spending power. We are planning to offer the Bachelor of Science in Manufacturing Engineering degree in a face-to-face format. There are no accredited Bachelor of Science in Manufacturing Engineering degree programs in Indiana according to ABET (ABET 2015). In addition, there are only four programs in nearby states (Northwestern University, Bradley University, Ohio University, and Central State University) with a total of 19 programs in the U.S. A manufacturing degree also will create synergies with USI's current Advanced Manufacturing and Industrial Supervision degree programs.

#### • How is it consistent with the mission of the institution?

 The proposed BSMfgE program directly supports USI's mission by enabling students to engage in learning, to advance in education and knowledge, and to enhance civic and cultural awareness. Through the program, students will develop the knowledge, skills, attitudes, and critical thinking necessary to become successful manufacturing engineers. The program will respond to Indiana's need for a Manufacturing Engineering degree program.

### • How does the program fit into the institution's strategic and/or academic plan?

- The proposed BSMfgE degree program fits USI's strategic plan by meeting the needs and goals of the Evansville metropolitan area as well as the region and manufacturing profession. The program supports the strategic goals of USI (see Appendix 1 for a link) by enhancing experiential learning, increasing the graduation rate and increasing diversity. The program addresses these goals as described below.
  - <u>Enhance Experiential Learning</u>: The BSMfgE degree program offers students hands-on experiences within each project and laboratory class, opportunities to participate in co-operative education and internships, and student organizations that participate in national engineering competitions.
  - <u>Increased Graduation Rate</u>: The proposed BSMfgE degree program will help USI further its goal to improve recruitment and retention because it will be a discipline specific engineering degree that is better understood and known than the general engineering program. In addition, the program would be only one of approximately 19 manufacturing engineering programs in the U.S.
  - <u>Increased Diversity</u>: According to American Society of Engineering Education Publication "Engineering by the Numbers" (Yoder, 2013), 29.1% of graduates in Manufacturing/Industrial/Systems engineering programs are women. The addition of the BSMfgE would increase USI's number of female graduates in a STEM field.

## • How does this program build upon the strengths of the institution?

- Since 2002, USI has offered a Bachelor of Science in Engineering (BSE) program that has graduated 264 students. This program requires students to choose one of five emphasis areas, Mechanical, Electrical, Civil, Industrial or Mechatronics, prior to starting the final two years of their degree work. A typical curriculum taken by a BSE student is nearly identical to that of a BSMfgE student. Thus a move to a BSMfgE program is building on the strong foundation of the curriculum, faculty and facilities that presently exist to support the BSE program.
- It is anticipated that students who are majoring in Manufacturing Engineering will have a wide variety of co-op and internship opportunities within manufacturing firms in the southwest Indiana region.

## b. State Rationale:

- How does this program address state priorities as reflected in *Reaching Higher*, *Achieving More*?
  - *Reaching Higher, Achieving More's* goal of a "workforce-aligned" higher-education system would be addressed by the proposed BSMfgE program at USI. The goal of the

BSMfgE program is to deliver an educational program of study that prepares graduates who are fully qualified for entry-level positions in the professional sector of the manufacturing engineering career field, whether private industry, consulting, or governmental agencies. The program graduates will be capable of completing the requirements for registration as professional engineers in Indiana and other states. Obtaining a professional degree results in an increase of \$510 in median weekly salary over obtaining a bachelor's degree alone, while also having a 3% lower unemployment rate (*Reaching Higher* 6). Additionally, the BSMfgE program will enhance Indiana's economic competitiveness by helping to produce a higher-trained workforce with greater spending power.

• The BSMfgE program also would address the "mission-driven" goal of *Reaching Higher, Achieving More* by implementing Indiana's first Bachelor's degree in Manufacturing Engineering and providing student's in Southwest Indiana with an opportunity to obtain a discipline specific engineering degree.

#### c. Evidence of Labor Market Need

#### i. National, State, or Regional Need

- Is the program serving a national, state, or regional labor market need?
  - According to the Bureau of Labor Statistics (BLS), U.S. manufacturing employs the most people of any goods-producing industry in the country (BLS.gov).
     Manufacturing as a whole employed more than 12 million individuals in 2013.
  - According to the Indiana Department of Workforce Development (DWD), jobs in manufacturing engineering will increase by 6.5% in Indiana by 2022 (DWD 2014), which is faster than the national average. The proposed BSMfgE program will serve the community, region, and state as well as fulfilling an increased labor market for manufacturing engineers.

#### ii. Preparation for Graduate Programs or Other Benefits

- Does the program prepare students for graduate programs or provide other benefits to students besides preparation for entry into the labor market?
  - The program would prepare students to enter a graduate program in Manufacturing or Industrial Engineering. The BSMfgE also would prepare students to become professional engineers in Indiana and other states, as well as preparing students to become Certified Manufacturing Engineers through the Society of Manufacturing Engineers.

#### iii. Summary of Indiana DWD and/or U.S. Department of Labor Data

- Summarize the evidence of labor market demand for graduates of the program as gleaned from employment projections made by the Indiana Department of Workforce Development and/or the U.S. Department of Labor
  - Table 1 shows an excerpt from the Bureau of Labor Statistics projections for Manufacturing Engineering from 2013 – 2022. While overall growth is expected to be 4.5%, there are industries that have growth as high as 39.5%. Indiana's DWD website projects that growth will be 6.5% for the state (<u>www.hoosierdata.in.gov</u>).

Industry	2012 Employment (in thousands)	2022 Employment (in thousands)	Percent Employment Change 2012-2022
Total Employment	223.3	233.4	4.5
Aerospace product and parts manufacturing	18.7	18.6	-0.4
Motor vehicle parts manufacturing	12.9	14.5	12.1
Management of companies and enterprises	12.7	14.4	13.2
Navigational, measuring, electromedical, and control instruments manufacturing	12.2	13.3	8.5
Semiconductor and other electronic component manufacturing	12.1	11.2	-7.5
Engineering services	11.7	16.3	39.5

#### Table 1. Projected Growth for Manufacturing Engineering

Source: <u>http://data.bls.gov/projections/nationalMatrix?queryParams=17-2112-4210&ioType=o</u>

## iv. National, State, or Regional Studies

# • Summarize any national, state, or regional studies that address the labor market need for the program. (Data provided in Appendix 2)

- A study by the Congressional Research Service, "The U.S. Science and Engineering Workforce: Recent, Current, and Projected Employment, Wages, and Unemployment," dated February 19, 2014, estimates the U.S. annual average number of job openings (job growth plus net replacements) for industrial (includes manufacturing) engineers will be 7,540 between 2012 and 2022.
- v. Surveys of Employers or Students and Analyses of Job Postings
  - Summarize the results of any surveys of employers or students and analyses of job openings relevant to the program. (Data provided in Appendix 3)
    - A search on Engineerjobs.com shows 8,293 jobs available in the United States are categorized as Manufacturing Engineering (as of August 6, 2015). Approximately 25% of those jobs are located in Indiana or its neighboring states. Within Indiana,

Illinois, and Kentucky are 869 of those jobs, and in Indiana alone, there are currently 309 Manufacturing Engineering jobs available.

#### vi. Letters of Support

- Summarize, by source, the letters received in support of the program. (Letters attached in Appendix 4)
  - A variety of support letters have been received in support of discipline specific engineering programs at the University of Southern Indiana:

Hon. Larry Bucshon, M.D., U.S. House of Representatives

Hon. Sue Ellspermann, Ph.D., Lt. Governor of Indiana

Hon. Vaneta Becker, State Senator, Indiana

Hon. Mark Messmer, State Senator, Indiana

Hon. Jim Tomes, State Senator, Indiana

Hon. Wendy McNamara, State Representative, Indiana

Hon. Thomas W. Washburne, State Representative, Indiana

Hon. Mike Braun, State Representative, Indiana

Hon. Lloyd Winnecke, Mayor, City of Evansville

Hon. Brad Ellsworth, President, Vectren Energy Delivery South

Evansville Vanderburgh School Corporation, Mr. Victor L. Chamness, Director of Science, Health, PE, and Digital Resources

Ivy Tech Community College, Hon. Jonathan Weinzapfel, Chancellor, Southwest/Wabash Valley

Crane Naval Surface Warfare Center, Brian D. Blackwell, Director of Engagement

Alcoa, Joseph E. Motz, Engineering Manager, Alcoa Warrick Operations

Toyota, Dan Potje, Vice President, Toyota Motor Manufacturing, Indiana

Three i Design, Bruce W. Woodruff, P.E., Senior Principal

Warehouse Services, Incorporated, Barry E. Cox, President and COO

## 3. Cost of and Support for the Program

## a. Costs:

- i. Faculty and Staff
  - Of the faculty and staff required to offer this program, how many are in place now and how many will need to be added (express both in terms of number of full- and part-time faculty and staff, as well as FTE faculty and staff)?
    - Currently the BSE curriculum is taught by a number of engineering faculty across the engineering disciplines, with the math and science courses taught by faculty in the respective departments. A roster of current faculty can be seen in Appendix 5.
    - The proposed BSMfgE program would require the addition of two manufacturing engineering faculty to meet accreditation needs for the offering of this program. This number can be reduced if the BSMfgE is introduced with a Bachelor of Science in Mechanical Engineering program.
    - No additional staff support will be required beyond that existing in the Engineering Department.
    - Funding for faculty lines would come from engineering program fees and increased tuition revenues due to program growth. Faculty lines also can be funded through internal reallocation of resources.

## ii. Facilities

- Summarize any impact offering this program will have on renovations of existing facilities, requests for new capital projects (including reference to the institution's capital plan), or the leasing of new space.
  - The proposed BSMfgE program will fall under the umbrella of the Engineering Department within the Pott College of Science, Engineering, and Education. The University of Southern Indiana has invested in modern facilities to support the existing Bachelor of Science in Engineering, Advanced Manufacturing, and Industrial Supervision programs, which also are administered from the Engineering Department. These include classroom and laboratory spaces within the \$31.9 million Business and Engineering Center (BEC) that was completed in 2010 and the \$3.3 million Applied Engineering Center (AEC), which opened in 2013. The proposed BSMfgE program will be housed primarily in the BEC. This 122,210 square foot building houses faculty offices, classrooms and laboratories for both the Engineering

Department and the College of Business. Additionally, some of the courses and research activities of the proposed BSMfgE program will take place in the 16,000 square foot AEC, which includes state of the art manufacturing equipment.

- The proposed BSMfgE program will share these facilities with the current program, thus no additional funding is required. Upgrade and maintenance costs will be covered through normal budgetary procedures by the Engineering Department and the Pott College of Science, Engineering, and Education.
- Appendix 6 lists existing laboratory facilities within the BEC and equipment available in the AEC.

#### iii. Other Capital Costs (e.g. Equipment)

- Summarize any impact offering this program will have on other capital costs, including purchase of equipment needed for the program.
  - Additional equipment may need to be purchased to support the research programs of new faculty members depending upon their areas of specialization.

#### **b.** Support:

- i. Nature of Support (New, Existing, or Reallocated)
  - Summarize what reallocation of resources has taken place to support this program.
    - The proposed BSMfgE degree program uses current courses taught in existing programs within the University. Primarily these are engineering core and elective courses, which support the Bachelor of Science in Engineering. However, the anticipated increase in enrollment and ABET accreditation requirements will require an additional two full-time tenured/tenure-track engineering faculty lines.
  - What programs, if any, have been eliminated or downsized in order to provide resources for this program?
    - No programs have been eliminated to provide resources for this program.
- ii. Special Fees above Baseline Tuition
  - Summarize any special fees above baseline tuition that are needed to support this program.
    - Some of the courses that will be part of the proposed BSMfgE degree program currently have lab fees between \$35 and \$200 that are assessed per student. In addition, 200-400 level engineering courses have a \$75/credit hour program fee. No new fees are being proposed for this program at this time.

#### 4. Similar and Related Programs

- a. List of Programs and Degrees Conferred:
  - i. Similar Programs at other Institutions
    - Campuses offering (on-campus or distance education) programs that are similar
      - Presently there are no ABET accredited Manufacturing Engineering degree programs in Indiana.
  - ii. Related Programs at the Proposing Institution
    - Bachelor of Science in Engineering
- b. List of Similar Programs outside of Indiana:
  - If relevant, institutions outside Indiana (in contiguous states, MHGEC states, or the nation, depending upon the nature of the proposed program) offering (on-campus or distance education) programs that are similar:
    - The following institutions have ABET Manufacturing Engineering programs in Illinois:
      - Bradley University
      - Northwestern University
    - The following institutions have ABET Manufacturing Engineering programs in Ohio:
      - Central State University
      - Miami University

#### c. Articulation:

It is envisioned that USI's proposed BSMfgE program will articulate 2+2 with VU, Ivy Tech, and IECC pre-engineering programs.

#### d. Collaboration with Similar or Related Programs on Other Campuses:

- Indicate any collaborative arrangements in place to support the program.
  - Currently, there are no collaborations planned with similar or related programs on other campuses.

### 5. Quality and Other Aspects of the Program:

#### a. Credit Hours Required/Time to Complete

- Credit hours required for the program and how long a full-time student will need to complete the program.
  - The BSMfgE program will require 128 credit hours for Calculus-ready students to complete. A full-time student can complete such a program in the traditional eight academic semesters over four years. See Appendix 7.

#### b. Exceeding the Standard Expectation of Credit Hours

- If the associate or baccalaureate degree program exceeds 60 or 120 semester hours, respectively, summarize the reason for exceeding this standard expectation.
  - It is estimated that this program will require 128 credit hours for Calculus-ready students to complete; this is consistent with other BSMfgE programs and with USI's existing BSE. The additional credit hours over 120 are required to meet ABET accreditation standards.
  - See Appendix 8.

#### c. Program Competencies or Learning Outcomes

- List the significant competencies or learning outcomes that students completing this program are expected to master.
  - The program must have documented student outcomes that prepare graduates to attain the program educational objectives. Student outcomes are outcomes (a) through (k) plus any additional outcomes that may be articulated by the program.
    - (a) an ability to apply knowledge of mathematics, science, and engineering;
    - (b) an ability to design and conduct experiments, as well as to analyze and interpret data;
    - (c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability;
    - (d) an ability to function on multidisciplinary teams;
    - (e) an ability to identify, formulate, and solve engineering problems;
    - (f) an understanding of professional and ethical responsibility;
    - (g) an ability to communicate effectively;
    - (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context;
    - (i) a recognition of the need for, and an ability to engage in life-long learning;
    - (j) a knowledge of contemporary issues; and

- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.
- Additionally, the BS Manufacturing Engineering program must prepare graduates to have proficiency in:
  - (l) materials and manufacturing processes: ability to design manufacturing processes that result in products that meet specific material and other requirements;
  - (m) process, assembly and product engineering: ability to design products and the equipment, tooling, and environment necessary for their manufacture;
  - (n) manufacturing competitiveness: ability to create competitive advantage through manufacturing planning, strategy, quality, and control;
  - (o) manufacturing systems design: ability to analyze, synthesize, and control manufacturing operations using statistical methods; and
  - (p) manufacturing laboratory or facility experience: ability to measure manufacturing process variables and develop technical inferences about the process.

## d. Assessment

- Summarize how the institution intends to assess students with respect to mastery of program competencies or learning outcomes.
  - The Engineering Department has long-standing assessment techniques for the existing BSE program to meet the ABET accreditation. This assessment includes the identification of courses which meet the ABET program outcomes and includes a staggered schedule of collecting assessment data that allows for at least two reviews in each six-year ABET cycle. The classes that are used for assessment are all a part of the proposed program, and therefore the assessment methods, techniques, and cycle will be used for this program.
  - The additional Manufacturing Engineering criterion listed above will be assessed in the following Engineering courses:
    - ENGR 362 Manufacturing
    - IME 331 Introduction to Statistical Quality Control
    - IME 412 Production Control
    - IME 414 Process and Facility Design
    - ME 364 Materials Science
    - ME 366 Dynamics of Machinery

#### e. Licensure and Certification

#### Graduates of this program will be prepared to earn the following:

• State License:

- Graduates of the program will be prepared to earn a professional engineering license in the State of Indiana. Based on Indiana Code 25-31-1-12, qualifications for professional registration include graduation from an "approved engineering curriculum;" four years of progressive engineering experience; and successful completion of the Fundamentals of Engineering (FE) and Principles of Practice of Engineering (PE) exams. With ABET accreditation, the program would be an "approved engineering curriculum" and thus all graduates satisfy the first requirement. Further, students in the final term of the program will be expected to take the FE exam. When successful, they would immediately qualify for certification as an Engineering Intern.
- National Professional Certifications (including bodies issuing the certification):
  - o None
- Third-Party Industry Certifications (including the bodies issuing the certifications):
  - o None

#### f. Placement of Graduates

- Please describe the principal occupations and industries in which the majority of graduates are expected to find employment.
  - Graduates would be employed as manufacturing engineers primarily in the manufacturing sector. Industries providing jobs include aerospace, food production, pharmaceuticals, medical, automotive industries, etc.

#### g. Accreditation

- Accrediting body from which accreditation will be sought and the timetable for achieving accreditation.
  - o ABET
  - It is anticipated that accreditation of the proposed BSMfgE program will be sought in 2018.
- Reason for seeking accreditation.
  - ABET accreditation provides international recognition of the quality of the program, and in particular allows prospective students to realize the quality of the education they will receive. ABET accreditation also allows employers to understand that the graduating students are prepared for their profession. Licensing bodies and registration and certification boards often require graduation from an ABET-

accredited program as a minimum qualification. Finally, the ABET accreditation process gives programs structured mechanisms to assess, evaluate and improve their educational practices.

## 6. Projected Headcount and FTE enrollment:

• Report headcount and FTE enrollment and degrees conferred data in a manner consistent with the Commission's Student Information System

<b>Enrollment</b>	Year 1	Year 2	Year 3	Year 4	Year 5
Projections					
Full-Time	30	32	34	36	38
Part-Time	2	2	3	5	5
Enrollment					
Projections					
(FTE)					
Full-Time	30	32	34	36	38
Part-Time	1	1	2	3	3
Degrees					
Conferred	0	0	5	6	6
Projections					

- Report a table for each campus or off-campus location at which the program will be offered.
  - All BSMfgE courses will be delivered on the USI campus.
- If the program is offered at more than one campus or off-campus location, a summary table, which reports the total headcount and FTE enrollments and degrees conferred across all locations, should be provided.
  - Not applicable.
- Round the FTE enrollments to the nearest whole number.
  - See the above table.
- If the program will take more than five years to be fully implemented and to reach steady state, report additional years of projections.
  - Not applicable.

# COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM C:	Academic Degree Programs for Expedited Action
Staff Recommendation	<ul> <li>That the Commission for Higher Education approve by consent the following degree programs, in accordance with the background information provided in this agenda item:</li> <li>Master of Science in Nursing to be offered by Indiana University Southeast</li> <li>Bachelor of Arts in Spanish to be offered by Indiana University East</li> <li>Bachelor of Arts and Bachelor of Science in Physics to be offered by the University of Southern Indiana</li> </ul>
Background	The Academic Affairs and Quality (AA&Q) Committee reviewed these proposed programs at its January 19, 2016 meeting and concluded that the MS in Nursing to be offered by Indiana University Southeast, BA in Spanish to be offered by Indiana University East, and BA and BS in Physics to be offered by the University of Southern Indiana should be placed on the Commission's February 11, 2016 agenda for expedited action.
Supporting Document	Academic Degree Programs on Which Staff Propose Expedited Action, February 11, 2016.

#### Academic Degree Programs on Which Staff Propose Expedited Action February 11, 2016

#### CHE 15-35 Master of Science in Nursing to be offered by Indiana University Southeast

Proposal received on November 9, 2015 CIP Code: 51.3801 Fifth Year Projected Enrollment: Headcount – 30, FTEs – 19 Fifth Year Projected Degrees Conferred: 10

The proposed program will be offered through the School of Nursing, IU Southeast is one of only two public university campus that do not offer a Master of Science in Nursing (M.S.N.); Purdue North Central does not offer an M.S.N. either, however that campus and Purdue Calumet, which does offer an M.S.N., will shortly unify to become Purdue Northwest. Students enrolling in the proposed program will follow a cohort model and can choose between two tracks: one for nurse educators and another for nurse administrators. Students enrolling in the former track will be prepared to become a Certified Nurse Educator (CNE) issued through the National League for Nursing (NLN). Students choosing the latter track will be prepared to become certified through the American Nurses Credentialing Center (ANCC) as a Nurse Executive – Board Certified (NE-BC).

#### CHE 15-33 Bachelor of Arts in Spanish to be offered by Indiana University East

Proposal received on November 9, 2015 CIP Code: 16.0905 Fifth Year Projected Enrollment: Headcount – 48, FTEs – 48 Fifth Year Projected Degrees Conferred: 12

The proposed program will be offered through the School of Humanities and Social Sciences. All public university campuses offer baccalaureate degrees in Spanish, with the exception of IU East and IU Kokomo. The East campus does offer a minor in Spanish, which 25 students are presently pursuing. A minimum of three credits of overseas study related to Spanish, which can include an internship or service learning experience, is required to complete the degree; all campuses within the IU system collaborate in providing study abroad opportunities for students. The proposed baccalaureate in Spanish requires 120 semester hours of credit, thus meeting the standard credit hour expectation for baccalaureate degrees. The University does not have a signed articulation agreement with Ivy Tech Community College; however, two beginning and two intermediate Spanish courses are part of the Core Transfer Library, which means equivalent Ivy Tech and VU Spanish courses are fully transferable and can count toward meeting the major requirements for the B.A. in Spanish.

#### CHE 15-36 Bachelor of Arts and Bachelor of Science in Physics to be offered the University of Southern Indiana

Proposal received on November 13, 2015 CIP Code: 03.0104 Fifth Year Projected Enrollment: Headcount – 24, FTEs – 24 Fifth Year Projected Degrees Conferred: 6

The proposed program will be offered through the Department of Geology and Physics in the Pott College of Science, Engineering, and Education. Although the program will be a relatively small program, many Physics courses are offered in support of other degree programs at USI. Eight public institutions currently offer baccalaureate Physics programs (Ball State, Indiana State, IU Bloomington, IPFW, IUPUI, IU South Bend, Purdue Calumet, and Purdue West Lafayette). The proposed baccalaureate in Physics requires 120 semester hours of credit, thus meeting the standard credit hour expectation for baccalaureate degrees. The University is in the process of developing articulation agreements with Ivy Tech Community College and Vincennes University. USI has already identified 26 credit hours at Ivy Tech and 28 credit hours at VU in Physics, Chemistry, and Calculus courses that will satisfy the bachelor's in Physics, in addition to the 30-hour Transfer General Education Core. When completed, the articulation agreements will allow associate degree graduates to transfer 60 credits toward the Physics degree and enter USI ready for upper level Physics coursework.

# COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM D:	<u>College of Health and Human Services Renovation and</u> Expansion – Indiana State University
Staff Recommendation	That the Commission for Higher Education recommends approval to the State Budget Agency and the State Budget Committee of the following project: College of Health and Human Services Renovation and Expansion – Indiana State University
Background	By statute, the Commission for Higher Education must review all projects to construct buildings or facilities costing more than two million dollars (\$2,000,000), regardless of the source of funding. Each repair and rehabilitation project must be reviewed by the Commission for Higher Education and approved by the Governor, on recommendation of the Budget Agency, if the cost of the project exceeds two million dollars (\$2,000,000) and if any part of the cost of the project is paid by state appropriated funds or by mandatory student fees assessed all students. Such review is required if no part of the project is paid by state appropriated funds or by mandatory student fees and the project cost exceeds two million dollars (\$2,000,000). A project that has been approved or authorized by the General Assembly is subject to review by the Commission for Higher Education. The Commission for Higher Education shall review a project approved or authorized by the General Assembly for which a state appropriation will be used. All other non-state funded projects must be reviewed within ninety (90) days after the project is submitted to the Commission.
Supporting Document	College of Health and Human Services Renovation and Expansion – Indiana State University

#### College of Health and Human Services Renovation and Expansion – Indiana State University

#### **STAFF ANALYSIS**

Indiana State University, through its Board of Trustees, requests approval to proceed with expansion and renovation of the College of Health and Human Services (CHHS) facility on its campus. The existing facility was constructed in two phases totaling 293,846 square feet; the oldest part of the facility was built in 1961 and an addition was constructed in 1986. No significant upgrades or replacement of mechanical, electrical, or plumbing systems has occurred since original construction. The instructional spaces used by the College are inadequate to accommodate current instructional technologies and comply with current safety standards.

The first phase of the expansion/renovation project would add 87,000 gross square feet to the existing facility to house classrooms, laboratories, seminar rooms, office and service space to accommodate new academic programs in the College as well as departments of the College that are located in three different campus buildings and an off-campus site. Consolidation of faculty and staff into a single structure will permit stronger interdisciplinary collaboration among health profession faculty and students. The second phase includes converting existing office space in the CHHS facility to classrooms and laboratories, replacing outdated and obsolete mechanical and electrical systems, and updating building finishes. The renovation and expansion will allow for both consolidation and strategic growth of the College of Health, and Human Services programs.

**Comparable Projects:** Comparable projects include: IUPUI Rotary Building Renovation with 63,938 GSF at \$256 per GSF, IUPUI School of Nursing 4th floor renovation with 28,800 GSF at \$192 per GSF, Vincennes University Homeland Security Renovation with 24,347 GSF at \$82 per GSF, ISU University Hall renovation with 93,643 GSF at \$178 per GSF, and IU School of Medicine-Center for Drug Discovery-Wishard/Dunlap Building Lab Renovation with 135,000 GSF at \$185 per GSF.

Funding: This project is estimated to cost \$64,000,000 paid by fee replacement.

#### **Additional Staff Notes:**

This project was submitted by Indiana State University in fall of 2014 as part of the institution's biennial budget request. This project was supported by the Commission in its budget recommendations to the General Assembly. The project was funded by the General Assembly and supported by the Governor.

#### PROJECT SUMMARY AND DESCRIPTION FOR: COLLEGE OF HEALTH AND HUMAN SERVICES RENOVATION AND EXPANSION

	• •	· · · · · · · · · · · · · · · · · · ·					
	ate University	Budget Agency Project No.: <u>C-1-15-2-0</u>					
<u>Campus:</u>		Institutional Priority: <u>1</u>					
Previously approved by General Assem	ibly: Yes	Previously recommended by CHE: Yes					
Part of the Institution's Long-term Cap	<u>oital Plan:</u> <u>Yes</u>						
Project Summary Description:							
	lion for the renovation and e	xpansion of the College of Health and Human Services facility. The					
		significantly upgraded since original construction of the facilities ir					
		chnologies and meet contemporary safety standards. The addition of					
several new academic programs within the	e College has created the ne	ed for additional classroom and laboratory space.					
Summary of the impact on the education							
		in the College of Health and Human Services (CHHS) to be housed in					
one location as opposed to the current physical configuration of the College that includes three different buildings and an off-campus site.							
The seventh department would be housed in a facility adjacent to the renovated and expansion space. Housing the majority of the CHHS faculty and staff in one facility promotes easier access for faculty collaboration on teaching, research, and community outreach projects as							
well as creating more efficient space utilization of classrooms and laboratories.							
Project Size: 380,846 GSF	229,081 ASF	60.2% ASF/GSF					
Net change in overall campus space:	87,000 GSF	50,000 ASF					
Total cost of the project (1):	\$ 64,000,000	Cost per ASF/GSF: \$ 168.05 GSF					
		<b>\$ 279.38</b> ASF					
Funding Source(s) for project (2):	\$ 64,000,000 - IC-21-	34-6 through 10 (Fee replacement)					
Funding Source(s) for project (2).		nount and note the fund source/bonding authority here					
		nount and note the fund source/bonding authority here					
		nount and note the fund source/bonding authority here					
Estimated annual data normant (4).	\$ 4,709,232						
<u>Estimated annual debt payment (4):</u>	\$ 4,709,232						
Are all funds for the project secured:	Yes						
Estimated annual change cost of building	ng operations based on the	project: \$ 437,817					
Estimated annual repair and rehabilita	tion investment (3):	\$ 694,435					
(1) Projects should include all costs associated with	the project (structure, A&E, infras	tructure, consulting, FF&E, etc.)					

(2) Be consistent in the naming of funds to be used for projects. If bonding, note Bonding Authority Year (1965, 1929, 1927, etc.)

(3) Estimate the amount of funding the institution would need to set aside annually to address R&R needs for the project. CHE suggests 1.5% of total construction cost.

(4) Annual debt payment assumed using 20 years at 4.00% interest to match fee replacement appropriation for project.

- If project is a lease-purchase or lease, adjust accordingly. Note the total cost of the lease in the project cost, and annual payments in project description

#### PROJECT DETAILED DESCRIPTION - ADDITIONAL INFORMATION FOR: COLLEGE OF HEALTH AND HUMAN SERVICES RENOVATION AND EXPANSION

Institution:	Indiana State University	Budget Agency Project No.:	<u>C-1-15-2-02</u>
<u>Campus:</u>		Institutional Priority: <u>1</u>	
Description of I	Project		
	sists of the renovation and expansion of the College of He	ealth and Human Services facility. The renova	tion of existing
space will replace	ce or upgrade existing building systems and finishes. All fication of the project, if desired.		
addition constru footage of the bu within the Colle	Health and Human Services consists of two phases of con acted in 1986. The buuilding contains a gymnasium, pool uilding is 293,846 with 179,081 of assignable square feet ge as well as to accomodate departments within the Colle 50,000 of this amount considered as assignable.	, classrooms, and faculty offices. The total exi . An expansion of the facility to house new aca	isting gross square ademic programs
guidelines in pla	no significant upgrades to this facility since original const ace today and is inadequate for the type of innovative pro- e the educational needs of students, the community, and r	gramming necessary for the College of Health,	
programs. Upda	and expansion will allow for both consolidation and strate ated project cost estimates have been provided by Ratio A hrough existing budgets by internal reallocation and energ	architects as of December 2015. An increase i	
	ose of the Program		ate and an durate
level, to serve th and the College for collaboration	as a long and respected history of providing nursing and he he health care needs of the Wabash Valley and the State of of Health and Human Performance into a combined Collen hetween health-oriented units, allowed for the developm d community partnerships to better meet state and regiona	f Indiana. The merger in 2007 of the former C ege of Health, and Human Services provided g nent of several new academic programs related	ollege of Nursing reater opportunity
the seven depart multiple buildin existing College promotes better the University si	roject to renovate and expand the existing College of Heat timents within the College into one building as opposed to ags. The seventh academic department (Applied Medicing e facility. To bring all of the academic departments of the access for faculty collaboration on teaching and improve ignificantly closer to providing an educational facility that ition best practices.	the current physical configuration of the Colle e and Rehabilitation) is housed immediately ad College of Health and Human Services into or s academic support to students. Moreover, thi	ege that includes ljacent to the ne location is project will move
programs and ha	the departments of the College of Health and Human Serv ave provided quality educational programs for both under high standards despite the fact the instructional facilities of appropriate.	graduate and graduate students. The College c	continues to
Five specific goa	als of the project are as follows:		
systems in the b	lated and obsolete mechanical and electrical systems – Th uilding are in need of immediate upgrade to meet the nee a cannot effectively handle the demands that are currently	ds of a 21st century learning environment. Spe	ecifically, the

hallways is also in need of improvement. Moreover, the buildings electrical systems must be revamped in order to facilitate new

information technologies that are essential learning tools in the College of Health and Human Services.

2. Meeting contemporary safety and access standards – Existing instructional and instructional support spaces in use by the College of Health and Human Services were designed according to lower safety and access standards than the current OSHA and ADA standards in force today, and the condition of some of the mechanical systems has made meeting even those older standards a challenge. The conditions in many of the instructional classrooms and laboratories in the facility do not meet current OSHA standards – and have the possibility of adversely affecting all persons in the building in serious ways. Although the facility is accessible to physically challenged students in the simplest sense (i.e. students can travel into all of the rooms), the instructional spaces are not properly designed to meet the needs of wheelchair-bound students. Physically challenged students contribute to the diverse student body of the College of Health and Human Services, and the University will insure a renovated and expanded facility in within full compliance of current ADA law and OSHA regulations.

3. Enhancing instruction capabilities – The existing facilities in use by the College of Health and Human Services have proven inadequate for the type of innovating programming needed by the College to meet the state's wellness needs. The multi-disciplinary approach of the College will be greatly enhanced with all faculty and instruction spaces within or adjacent to the same facility. This will allow for increased efficiency and collaboration among departments. Likewise, the use of technology in instruction has vastly changed since the time of original construction.

4. Health promotion and social wellness – A renovated and expanded College of Health and Human Services facility will serve as the hub of health promotion and social wellness for the Indiana State University campus community, and Wabash Valley residents. Its design is purposely inviting to ISU faculty, staff, and students, and to citizens living in the region. Upon completion of this facility all seven departments of the College will have state-of-the-art facilities to:

• Provide discipline specific instruction that prepares the next generation of professionals to advance the health and social conditions of individuals, families and neighborhoods.

• Provide continuing education programs to health and social service professionals that facilitate the most contemporary, evidenced-based care of citizens in our region, state, and nation.

 Provide inter-professional education opportunities that integrate faculty and students across the ISU campus with community members, so that our students are prepared to optimally function in a team environment that addresses complex health and social issues.

• Conduct socially responsive research to addresses regional, state, national and international health and social problems. The facilities will serve to advance the clinical and community research endeavors of faculty, while also providing education opportunities for students interested in pursuing health or social science research careers.

• Serve as the campus-based hub of health promotion and social wellness for community members. This facility will be a health and social wellness information resource where community members can participate in educating our faculty and students about the pressing health and social needs of the area.

5. Meeting the State's Workforce and Economic Development Needs – State of the art instructional spaces will both facilitate improved student learning and provide students with the tools to be successful in the work environments they will encounter as employees. Improved instructional facilities enable the College of Health and Human Services curriculum to augment ongoing relationships with the health professions by increasing the ability to provide more well-educated professionals to enter the workforce and create more opportunities for extramural partnerships. Consequently, graduates will be better prepared to assume positions of responsibility in health care fields.

#### **Space Utilization**

To meet the long-term programmatic needs of the College of Health, and Human Services a renovated facility is needed with additional space for expanded and new academic programs. The current space allocated to the College does not allow for an effective or efficient use of space or provide for collaborative interaction among faculty and students.

#### **Comparable Projects**

Comparable projects include: IUPUI Rotary Building Renovation with 63,938 GSF at \$255.60 per GSF, IUPUI School of Nursing 4th floor renovation with 28,800 GSF at \$192 per GSF, VU Homeland Security Renovation with 24,347 GSF at \$82 per GSF, ISU University Hall renovation with 93,643 GSF at \$178 per GSF, and IU School of Medicine-Center for Drug Discovery-Wishard/Dunlap Building Lab Renovation with 135,000 GSF at \$185 per GSF.

#### **Background Materials**

The renovation and expansion of the College of Health and Human Services was authorized by the 2015 session of the Indiana General Assembly. Ratio Architects has provided architectural and engineering services for the project. Bonding Authority IC 21-34-6 through 10 would be utilized to issue debt for funding of the renovation and expansion.

CAPITAL PROJECT REQUEST FORM INDIANA PUBLIC POSTSECONDARY EDUCATION	INSTITUTION CAMPUS SPACE DETAILS FOR COLLEGE OF HEALTH AND HUMAN SERVICES RENOVATION/EXPANSION
--	--

College of Health and Human Services				Subtotal Current		New Space in	
Renovation/Expansion	Current Space	Space Under	Space Planned	and Future	Space to be	Capital	Net Future
C-1-15-2-02	in Use	Construction (1)	and Funded (1)	Space	Terminated (1)	Request (2)	Space
A. OVERALL SPACE IN ASF							
Classroom (110 & 115)	103,010		10,100	113,110			113,110
Class Lab (210,215,220,225,230,235)	218,268		1,800	220,068			220,068
Nonclass Lab (250 & 255)	53,277		1,510	54,787			54,787
Office Facilities (300)	434,064		30,739	464,803			464,803
Study Facilities (400)	165,324			165,324			165,324
Special Use Facilities (500)	257,642			257,642			257,642
General Use Facilities (600)	335,834		5,851	341,685			341,685
Support Facilities (700)	187,669			187,669			187,669
Health Care Facilities (800)	13,746			13,746			13,746
Resident Facilities (900)	845,710			845,710			845,710
Unclassified (000)	14,951			14,951			14,951
<b>B. OTHER FACILITIES</b>				Contraction of the			
(Please list major categories)				E			
TOTAL SPACE	2,629,495	1	50,000	2,679,495	1	ĩ	2,679,495

Notes:

(1) Identify in a footnote the specific facilities that are included in the data in these columns. Do not include pending approval, non-submitted projects or non-funded projects. Space Planned and Funded includes the renovation/expansion of the College of Health and Human Services facility as approved by the 2015 session of the Indiana General Assembly.

(2) Should include capital projects requested by the institution based on 2015-17 Capital Request Summary

- Space/Room codes based on Postsecondary Ed Facilities Inventory and Classification Manual (2006).

### CAPITAL PROJECT COST DETAILS FOR: COLLEGE OF HEALTH AND HUMAN SERVICES RENOVATION AND EXPANSION

ampus:	Budget Agency Project No.:C-1-15-2-02Institutional Priority:1
NTICIPATED CONSTRUCTION SCHEDULE         Month         Bid Date       May         Start Construction       June         Occupancy (End Date)       March	<u>Year</u> 2016 2019
STIMATED CONSTRUCTION COST FOR PROJECT Planning Costs a. Engineering b. Architectural c. Consulting	Estimated         Escalation         Cost Basis (1)       Factors (2)         \$ 1,600,000       \$ -         \$ 1,600,000       \$ -         \$ 2,850,000       \$ -         \$ 300,000       \$ 300,000
<u>Construction</u> a. Structure b. Mechanical (HVAC, plumbing, etc.) c. Electrical	\$ 32,525,000       \$ -       \$ 32,525,000         \$ 10,268,000       \$ -       \$ 10,268,000         \$ 5,774,000       \$ -       \$ 5,774,000
<u>Movable Equipment</u> <u>Fixed Equipment (Technology)</u> <u>Site Development/Land Acquisition</u> <u>Other (Contingency, Permiting, Testing)</u>	\$ 2,712,500       \$ -       \$ 2,712,500         \$ 2,712,500       \$ -       \$ 2,712,500         \$ 3,433,000       \$ -       \$ 3,433,000         \$ 1,825,000       \$ -       \$ 1,825,000

(1) Cost Basis is based on current cost prevailing as of: (December 2015)

(2) Explain in the Description of Project Section of the "Cap Proj Details" schedule the reasoning for estimated escalation factors

#### CAPITAL PROJECT OPERATING COST DETAILS FOR: COLLEGE OF HEALTH AND HUMAN SERVICES RENOVATION AND EXPANSION

Institution: Indiana State University Campus:		<u>Budget Agen</u> Institutional		<u>.:</u>	<u>C-1-15-2-02</u>
	GSF	OF AREA AI	FECTED B	Y PROJECT	380,846
ANNUAL OPERATING COST/SAVINGS (1)	Cost per GSF	Total Operating Cost	Personal Services	Supplies and Expenses	Renovated
<ol> <li>Operations</li> <li>Maintenance</li> <li>Fuel (Steam)</li> <li>Utilities</li> <li>Other (Chilled Water)</li> </ol>	0.62 (0.00) 0.19 0.23 0.10	\$ 73,743 \$ 88,469	NAME AND ADDRESS OF A DESCRIPTION OF A D		
TOTAL ESTIMATED OPERATIONAL COST/SAVINGS	the second of the second second second	\$ 437,817	\$ 183,236	and the second se	
Description of any unusual factors affecting operating and maint The increase in annual operating cost is a result of the addition of gro					

(1) Based on figures from "Individual Cap Proj Desc" schedule

# COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM E:	Capital Projects for Expedited Action
Staff Recommendation	<ul> <li>That the Commission for Higher Education recommends approval to the State Budget Agency and the State Budget Committee of the following projects:</li> <li>Ball State University – Emens Auditorium Lobby Renovation and Expansion</li> <li>Indiana University Bloomington – Marching Hundred Hall</li> </ul>
	<ul> <li>Purdue University West Lafayette – Ross Ade Lease</li> </ul>
Background	Staff recommends approval to the State Budget Agency and the State Budget Committee of the following capital projects in accordance with the expedited action category originated by the Commission for Higher Education in May 2006. Institutional staff will be available to answer questions about these projects, but the staff does not envision formal presentations.
Supporting Document	Background Information on Capital Projects on Which Staff Proposes Expedited Action, February 11, 2016

## Capital Projects for Expedited Action February 11, 2016

## D-1-16-2-01 Ball State University – Emens Auditorium Lobby Renovation and Expansion

Ball State University and its Board of Trustees requests to proceed with the renovation and expansion of the lobby within the John R. Emens College-Community Auditorium. The auditorium opened in 1964 and has served as a preeminent community and university main stage where world-class artists, entertainers and lecturers perform and life events such as graduations, concerts, and recitals occur. The enhancements will include expansion of the lobby to provide space for gatherings of pre-event, intermission, and post-event crowds. Restrooms will be added to the first floor level for the conveniences of guests, and the box office will be relocated from the vestibule to an interior location. A second floor above the lobby expansion will provide space for a hospitality room, food staging area, and other support space. The total cost of this project is estimated to be \$5,000,000 and will be financed from private gifts and Nonstate Supported Renewal and Replacement Funds.

## A-1-16-1-03 Indiana University Bloomington – Marching Hundred Hall

Indiana University and its Board of Trustees request approval to proceed with construction of Marching Hundred Hall, a 33,662-square foot facility for the Indiana University Marching Hundred Band on the Bloomington campus. Since 1983, the group has been housed in a number of temporary spaces. The structure will provide convenient access to Assembly Hall and Memorial Stadium for students, faculty, and staff in support of University athletic events. The facility will be composed of a 6,000square foot rehearsal space, with two additional smaller rehearsal rooms at 2,600 square feet each that will provide additional flexibility for simultaneous practice of small ensembles. The project is estimated to cost \$10,000,000 and will be funded through Gifts through the Indiana University Foundation.

## B-1-16-5-05 Purdue University Player Performance Complex

Purdue University and its Board of Trustees request approval to enter into a lease amendment between Purdue University and the Ross-Ade Foundation. The Mackey Renovation lease is an already approved 40-year lease and lease-back arrangement executed in 2008 for the renovation of Mackey Arena and surrounding athletic support facilities, of which construction has been completed. Purdue University will partner with the Ross-Ade Foundation to deliver the project. The Ross-Ade Foundation will finance and construct the facility with an estimated cost of \$65 million, to be financed through certificates of participation to be retired through annual lease payments by the University to the Foundation. The University will reacquire the new facilities at the end of the lease term. Funding for the lease payments will be exclusively from the Athletic Department. The Purdue University Trustees approved a resolution to plan, finance, and construct the Football Performance Complex and requested participation of Ross-Ade Foundation on Dec. 19, 2015.

The Football Performance Complex project amends the Mackey lease and does not extend the term. The additional \$65 million financed lease payments will be an

incremental increase in the existing Mackey lease payments from the University to the Ross Ade Foundation.

This lease has been reviewed by the Attorney General's Office. The AG's office did not indicate anything that it would consider "amiss." The AG confirmed that the capital project did not invoke the CHE review process or approval by the State Budget Agency.

## COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM F:	Return on Investment Report
Staff Recommendation	For discussion only.
Background	The Commission for Higher Education's Return on Investment (ROI) reports, first released in 2013, demonstrated that completing a college degree matters, offering a significant economic return on investment for both individual students and the state. The reports also provided a college-level view of costs, student debt, top industries by fields of study, and average salaries one, five and 10 years after graduation. The third report in the ROI series and the accompanying interactive dashboard released in January 2016 offer more detailed information about the wage outcomes of specific degree programs by major, including short-term certificate programs of less than one year. The report data show that the payoff for degree completion increases over time and at each degree level, and that what students study matters more than where they study.

## REFURN ON INVESTMENT REPORTS 2016

Helping Hoosiers get the most for their higher education dollars



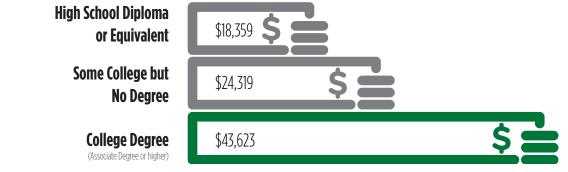
**INDIANA COMMISSION** for HIGHER EDUCATION



## **RETURN ON INVESTMENT 101**

An investment in higher education may be the smartest purchase Hoosiers ever make. The value of a college degree is undeniable... more opportunities, higher earnings and greater job security. But, the return on investment depends greatly on the choices individuals make—what they study, what credential they earn and how much debt they have to pay off.

## Higher education pays... and completion matters.



**BOTTOM LINE:** 

Any education beyond high school has value, but the real earning potential comes with completing a credential. College graduates earn more than \$1 million over their careers compared to non-college grads.

## 2

## The payoff increases over time... and at each degree level.

Education Level			Ty	pical Salary			
- ٦	After 1 year 🦳		<b>A</b>	fter 5 years —		— After 10 years	
Short-Term Certificate (<1 year)*	\$26,341	\$37,608					
Longer-Term Certificate (1+ year)	\$27,875	\$34,393		\$39,599			
Associate Degree (2 years)	\$32,351	\$40,299		\$47,610			
Bachelor's Degree (4 years)	\$32,804	\$41,049		\$50,041			
Master's Degree	\$47,308		\$5	5,563		\$62,479	

**BOTTOM LINE:** 

Indiana college grads earn nearly \$2 for every dollar spent on their degrees within only the first four years of graduation... the beginning of a lifetime return on investment. The long-term payoff is even greater at each higher education level.

## **3** v

## What you study matters... more than where you study.

Campus Type	Business	Nursing	Psychology
Four-Year Residential Research Campus	\$38,040	\$48,104	\$25,660
Four-Year Residential Non-Research Campus	\$30,457	\$46,956	\$23,756
Four-Year Regional Commuter Campus	\$32,025	\$46,449	\$24,900

NOTE: Though the data above are for Indiana four-year campuses, programs offered by Indiana community college campuses follow similar salary patterns by industry.



It pays to look at job market demand when choosing a college major. WHERE students go to college typically affects starting salaries by only a few thousand dollars per year, but salary differences by WHAT they study can add up to tens of thousands dollars per year.

## WHAT'S YOUR RC

The Indiana Commission for Higher Education has created an online estimator to help Hoosiers maximize their return on investment. At **LearnMoreIndiana.org/ROI**, you can see what college costs in Indiana, compare average student debt, and find the college degrees with the greatest employment prospects and earning potential in the state. Compare results by college campus, degree level and years after graduation.

1. Student Cost and Debt: Find the typical cost of college and level of student debt for each Indiana public college. 2. Employment by Program: See the most common areas of employment in Indiana for college graduates based on their program of study. 3. Salary by Program: Compare typical annual salaries for college grads employed in Indiana based on their program of study. > 0 An initiative of the Indiana Commission for Higher Education a f У 🖸 in ARN CAREER | COLLEGE | COST STUDENTS | ADULT LEARNERS | MILITARY | EDUCATORS | PARENTS | OUR PARTNERS | HOME » COST » COLLEGE COSTS » COLLEGE RETURN ON INVESTMENT **COLLEGE RETURN ON INVESTMENT COLLEGE COSTS** Indiana Public Colleges & Universities Return on Investment > College Costs Estimator > Typical College Expenses Student Costs and Debt > College Return on Investment CHE Return on Investment Data Definitions Student Costs and Debt Find the typical cost of college and level of student debt for each Indiana public college. Annual cost of college Ar BEFORE financial aid A nual cost of college Graduates' average hover and click icon to sort → AFTER financial aid Ball State \$13,049 \$11,151 73% \$21,490 \$20,226 \$26,529 \$25,948 Indiana State University IPFW \$20,226 \$24,790 \$23,116 \$19,924 \$19,721 \$24,022 \$21,568 \$19,516 \$23,941 \$19,54 \$11,151 \$12,335 \$11,361 \$7,948 \$9,834 \$25,948 \$30,301 \$26,261 \$30,077 \$25,704 \$32,780 \$28,420 \$22,661 78% IPFW IU Bloomington IU East IU Kokomo IU Northwest IU South Bend 969 82% \$9,834 \$11,866 \$10,997 \$10,184 \$12,713 73% 78%

## LearnMoreIndiana.org/ROI

\$16,435

\$20.782

\$20,782 \$21,072 \$23,468 \$18,977 \$17,228

\$8.532

\$10.644

\$7,923 \$13,541

\$13,153 \$9,805

IU Southeast

Ivy Tech Purdue Calumet

Purdue North Central

Vincennes University

Purdue West Lafayette

IUPUI

USI

Average Annual Salary: 2014 Indiana Census figures. Source: IPUMS-USA, University of Minnesota, www.ipu Typical Annual Salary: Represents the median salary for Indiana resident students who graduated from an Indiana public Typical Salary by Program and Campus Type: Represents a weighted average of Year 1 median wages for graduates in one of the identified programs of study/campus types. Source: IWIS

\$22,661 \$30,811

\$26,151

\$27,764

\$25,683

\$24,561 \$16,526

\$18,614

71%

58%

61%

61%

66% 63%

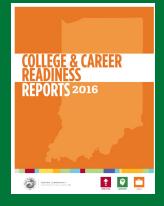
79%

77%

\*Short-Term Certificates: Earnings data for short-term certificate holders after 10 years are not currently available.

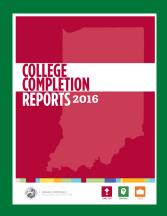
## **SPOTLIGHTING STUDENT SUCCESS**

Check out the Indiana Commission for Higher Education's complete annual data reporting series at www.che.in.gov.



## COLLEGE & CAREER READINESS REPORTS

Where do Indiana high school graduates go to college? Are they prepared for collegelevel coursework? And, how are they performing? College & Career Readiness Reports are available for every Indiana county, school corporation and high school.





## COLLEGE COMPLETION REPORTS

How many Hoosier college students graduate? How long does it take them to earn their degrees? And, where are the achievement gaps in college completion? College Completion Reports are available for every public college and university in Indiana.

## RETURN ON INVESTMENT REPORTS

How much does college cost in Indiana? What is the average student debt? And, which college degrees have the greatest job prospects and earning potential for Hoosier graduates? ROI Reports are available for every public college and university in Indiana.

**COLLEGE PLANNING** 



**CAREER SUCCESS** 

An initiative of the Indiana Commission for Higher Education

## COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

BUSINESS ITEM G:	2016-2017 Frank O'Bannon Award
Staff Recommendation	Adopt the amounts as set in the attached "grid," which represent continuation of the award amounts from the current academic year to the next.
Background	<ul> <li>In 2013, the Indiana General Assembly passed a comprehensive financial aid reform package, which requires the Commission to annually adopt a "schedule of awards," replacing the current formula process for award creation. The Schedule of Awards will be adopted by the Commission in February and will establish larger awards for students who complete 30 credit hours (or the equivalent), 60 credit hours (or the equivalent), or 90 credit hours (or the equivalent) in the prior academic year ("on-time award") than for students who complete at least 24/48/72 credit hours but less than 30/60/90 credit hours ("full-time award").</li> <li>IC 21-12-1.7-4 also requires that the Commission establish incentive awards for students who:</li> <li>Are "academic honors," which is defined, in the student's first year, as a student who graduated from high school with an academic honors or technical honors diploma or, after the student's first year, as a student who has maintained a cumulative grade point average of 3.0 on a 4.0 grading scale or its equivalent. (IC 21-12-1.7-1)</li> </ul>
	<ul> <li>Received an associate degree prior to enrolling in a baccalaureate program; or</li> <li>Made "accelerated progress" during the recipients' most recently concluded academic year. Accelerated progress is defined act</li> </ul>
	<ul> <li>defined as:</li> <li>successfully completing at least 39 credit hours or the equivalent by the end of the student's first academic year; or</li> <li>successfully completing at least 78 credit hours or the equivalent by the end of the student's second academic year.</li> </ul>
Supporting Document	2016-2017 Financial Aid Grid

# 2016-2017 FRANK O'BANNON GRANTS

## **BASE AWARD**

NSTITUTION TYPE         \$7									EXPECTE	<b>EXPECTED FAMILY CONTRIBUTION (EFC)</b>	ONTRIBUTIO	IN (EFC)						
On-Time         \$7,400         \$6,900         \$5,800         \$5,200         \$4,700         \$4,000         \$3,500         \$2,400         \$1,900         \$1,000         \$700         \$700         \$1,000         \$1,100         \$700         \$1,000         \$1,100         \$1,100         \$600         \$1,100         \$600         \$1,100         \$600         \$1,100         \$600         \$1,100         \$600         \$1,100         \$600	INSTITUTION TYPE		0\$	\$1 to \$500	\$501 to \$1,000	\$1,001 to \$1,500	\$1,501 to \$2,000	\$2,001 to \$2,500	\$2,501 to \$3,000	\$3,001 to \$3,500	\$3,501 to \$4,000	\$4,001 to \$4,500	\$4,501 to \$5,000	\$5,001 to \$5,500	\$5,501 to \$6,000	\$6,001 to \$6,500	\$6,501 to \$7,000	\$7,001 to \$7,500
Full-Time         \$6,800         \$5,800         \$5,300         \$4,800         \$4,300         \$3,700         \$1,700         \$1,700         \$1,700         \$60         \$60         \$60         \$		On-Time	\$7,400	\$6,900	\$6,300	\$5,800	\$5,200	\$4,700	\$4,000	\$3,500	\$2,900		\$1,900	\$1,200	\$700	\$0	\$0	\$0
On-Time         \$3,700         \$3,200         \$2,600         \$1,500         \$1,500         \$500         \$0         \$0         \$0           Full-Time         \$3,400         \$2,900         \$1,300         \$1,400         \$800         \$0         \$0         \$0         \$0           On-Time         \$3,100         \$2,500         \$1,300         \$1,300         \$1,300         \$800         \$0 <td>Private</td> <td>Full-Time</td> <td>\$6,800</td> <td>\$6,300</td> <td></td> <td>\$5,300</td> <td>\$4,800</td> <td>\$4,300</td> <td>\$3,700</td> <td>\$3,200</td> <td>\$2,700</td> <td></td> <td></td> <td>\$1,100</td> <td>\$600</td> <td>\$0</td> <td>\$0</td> <td>\$0</td>	Private	Full-Time	\$6,800	\$6,300		\$5,300	\$4,800	\$4,300	\$3,700	\$3,200	\$2,700			\$1,100	\$600	\$0	\$0	\$0
Full-Time         \$3,400         \$2,900         \$1,900         \$1,400         \$800         \$0         \$0         \$0         \$0           On-Time         \$3,100         \$2,500         \$1,300         \$800         \$0         \$0         \$0         Not E           Inll-Time         \$2,800         \$1,300         \$1,300         \$1,200         \$0         \$0         \$0         Not E		On-Time		\$3,200		\$2,100	\$1,500	\$900	\$0	\$0	\$0			Not Eliç	gible for Sta	ite Aid		
On-Time         \$3,100         \$2,500         \$1,300         \$800         \$0         \$0         \$0           Full-Time         \$2,800         \$1,800         \$1,200         \$700         \$0         \$0         \$0	Public	Full-Time	\$3,400	\$2,900	\$2,400	\$1,900	\$1,400	\$800	\$0	\$0	\$0			Not Eliç	gible for Sta	tte Aid		
Full-Time \$2,800 \$2,300 \$1,800 \$1,200 \$700 \$0 \$0 \$0 \$0	Proprietary or lvy		\$3,100	\$2,500	\$2,000	\$1,300	\$800	\$0	\$0	\$0			Z	ot Eligible f	or State Aic	7		
	Tech		\$2,800	\$2,300	\$1,800	\$1,200	\$700	\$0	\$0	\$0			z	ot Eligible f	or State Aic	75		

On-time awards are based on the completion of at least 30 credit hours by the end of the first year, 60 by the end of the second year, and 90 by the end of the third year. Full-time awards are based on the completion of at least 24 credit hours by the end of the first year, 48 by the end of the second year, and 72 by the end of the third year. Students in their first year will receive the on-time award amount. These students must complete 30 credits by the end of the first year to continue receiving the on-time amount in the following year.

the on-time award each year. Grandfathered students receive different incentives. Grandfathered students who graduated high school with an academic or technical honors Students who received state financial aid for the first time before academic year 2013-14 are grandfathered from credit completion requirements, and therefore receive diploma OR have already earned an associate degree receive an incentive of \$1,400 if attending a private institution, \$800 if attending a public institution, or \$700 if attending a proprietary institution or lvy Tech Community College.

## BASE AWARD + STUDENT PERFORMANCE INCENTIVE(S) = TOTAL STATE FINANCIAL AID AWARD







## ACADEMIC HONORS

\$800

First Year Only: Graduate high school with Academic or Technical Honors Diploma.

Second, Third, Fourth Years: Earn at least a 3.0 cumulative GPA through end of previous award year.

## ASSOCIATE DEGREE

\$800

First, Second, Third, Fourth Years: Earn an Associate Degree before enrolling in baccaulaurate program.

## ACCELERATED SCHEDULE \$1,300 Second, Third Years: Complete at least 39 credit hours by the

at least 39 credit hours by the end of the first year; 78 credit hours by the end of the second year.

Student with financial need may earn student performance incentives even if his or her base award is \$0.

COMMISSION FOR HIGHER EDUCATION Thursday, February 11, 2016

## INFORMATION ITEM A:

**Academic Degree Programs Awaiting Action** 

	Institution/Campus/Site	Title of Program	Date Received	<u>Status</u>
01	Indiana University Purdue University Indianapolis	Master of Science and Ph.D. in Applied Social and Organizational Psychology (IU)	8/28/2015	Under Review
02	Indiana University Purdue University Indianapolis	Ph.D. in American Studies (IU)	8/28/2015	Under Review
03	Indiana University Purdue University Indianapolis	PhD in Music Technology (IU)	9/3/2015	Under Review
04	University of Southern Indiana	Bachelor of Science in Manufacturing Engineering	10/2/2015	On the CHE agenda for action
05	University of Southern Indiana	Bachelor of Science in Mechanical Engineering	10/2/2015	On the CHE agenda for action
90	Indiana University Southeast	Bachelor of Science in Neuroscience	11/9/2015	Under Review
07	Indiana University Southeast	Master of Science in Nursing	11/9/2015	On the CHE agenda for action
08	Indiana University East	Bachelor of Arts in Spanish	11/9/2015	On the CHE agenda for action
60	University of Southern Indiana	Bachelor of Arts and Bachelor of Science in Physics	11/13/2015	On the CHE agenda for action

Under Review	Under Review
12/16/2015	12/21/2015
Bachelor of Science in Dental Technology (IU)	Ph.D. in Nursing
Indiana University Purdue University Fort Wayne	Purdue University West Lafayette
10	11

COMMISSION FOR HIGHER EDUCATION Thursday, February 11, 2016

## **INFORMATION ITEM B:**

## Academic Degree Program Actions Taken by Staff

	Institution/Campus/Site	Title of Program	Date	Change
			Approved	
01	University of Southern Indiana	Bachelor of Science in Business Education		Eliminating an existing program
02	Ivy Tech Community College – Multiple Locations	Certificate in Business Operations, Applications, and Technology		Changing the name of an existing program
03	Ivy Tech Community College – Multiple Locations	Associate of Applied Science in Business Operations, Applications, and Technology		Changing the name of an existing program
04	Ivy Tech Community College – Multiple Locations	Associate of Applied Science and Associate of Science in Kinesiology and Exercise Science		Changing the name of an existing program
05	Indiana University of Kokomo	Bachelor of Art and Bachelor of Science in Communication		Changing the name of an existing program
06	University of Southern Indiana	Professional Certificate in Crisis Resolution		Adding a certificate
07	University of Southern Indiana	Professional Sales Certificate		Adding a certificate
08	University of Southern Indiana	Human Resource Management Certificate		Adding a certificate
60	University of Southern Indiana	Innovation Management Certificate		Adding a certificate

	Institution/Campus/Site	Title of Program	Date	Change
			Approved	
10	Indiana University Northwest	Bachelor of Art in History		Adding distance education
11	Indiana University Northwest	Bachelor of Art in Philosophy		Adding distance education
12	Indiana University Northwest	Bachelor of Science in Computer Information Systems		Adding distance education
13	Indiana University Northwest	Bachelor of Science in Political Science		Adding distance education
14	University of Southern Indiana	Post-Master's Certificate in Adult- Gerontology Clinical Nurse Specialist		Adding a certificate
15	University of Southern Indiana	Post-Master's Certificate in Adult- Gerontology Nurse Practitioner (Acute)		Adding a certificate
16	University of Southern Indiana	Post-Master's Certificate in Adult- Gerontology Primary Care Nurse Practitioner		Adding a certificate
17	University of Southern Indiana	Post-Master's Certificate in Family Nurse Practitioner		Adding a certificate
18	University of Southern Indiana	Post-Master's Certificate in Nursing Management and Leadership		Adding a certificate
19	University of Southern Indiana	Post-Master's Certificate in Family Psychiatric Mental Health Nurse Practitioner		Adding a certificate
20	Indiana University Bloomington	Bachelor of Science in World Languages Education		Merging existing programs
21	Indiana University Southeast	Undergraduate Certificate in Healthcare Documentation		Changing the name of an existing program

	Institution/Campus/Site	Title of Program	Date	Change
			Approved	
22	Vincennes University	Certificate of Completion in Banking		Adding distance education to an existing program
23	Vincennes University	Certificate in Completion of Health Information Management Transcription		Suspending a program
24	Vincennes University	Certificate of Completion in Electronics Fundamentals		Suspending a program
25	Vincennes University	Certificate of Graduation in Electronics Fundamentals		Adding a certificate
26	Ball State University	Bachelor of Art and Bachelor of Science in Natural Resources and Environmental Management		Changing the CIP code
27	Indiana University Purdue University Indianapolis	Certificate in Geographic Information Science (IU)		Adding a certificate
28	Ivy Tech Community College – Multiple Locations	Certificate in Building Construction Management Specialist		Adding a certificate
29	Ivy Tech Community College – Multiple Locations	Technical Certificate in Building Construction Management Specialist		Adding a certificate
30	Ivy Tech Community College – Multiple Locations	Technical Certificate in Carpentry Specialist		Adding a certificate
31	Ivy Tech Community College – Multiple Locations	Technical Certificate in Electrical Specialist		Adding a certificate
32	Ivy Tech Community College – Multiple Locations	Associate of Applied Science in Building Construction Technology		Changing the name of an existing program
33	Ivy Tech Community College – All Locations	Digital Forensics/Network Penetration Certificate		Changing the number of credit hours
34	Ivy Tech Community College – All Locations	Network Security Certificate		Changing the number of credit hours

	Institution/Campus/Site	Title of Program	Date	Change
			Approved	
35	Ivy Tech Community College – All Locations	Cyber Security/Information Assurance Certificate		Changing the number of credit hours
36	Ivy Tech Community College – All Locations	Certificate in Database Administration/ Database Development/Data Analytics		Changing the number of credit hours
37	Ivy Tech Community College – All Locations	Certificate in Informatics		Changing the number of credit hours
38	Ivy Tech Community College – All Locations	Informatics Certificate		Changing the number of credit hours
39	Ivy Tech Community College – All Locations	Certificate in Information Technology Help Desk		Changing the number of credit hours
40	Ivy Tech Community College - All Locations	Information Technology Support Certificate		Changing the number of credit hours
41	Ivy Tech Community College – All Locations	Technical Certificate in Information Technology Support		Changing the number of credit hours
42	Ivy Tech Community College – All Locations	Certificate in Routing and Switching		Changing the number of credit hours
43	Ivy Tech Community College – All Locations	Technical Certificate in Network Infrastructure		Changing the number of credit hours
44	Ivy Tech Community College – All Locations	Microsoft Administration/Linux Administration Certificate		Changing the number of credit hours
45	Ivy Tech Community College – All Locations	Technical Certificate in Server Administration		Changing the number of credit hours
46	Indiana University Northwest	Post-Baccalaureate Certificate in Drug and Alcohol Counseling		Eliminating an existing program
47	Ivy Tech Community College – All Locations	Certificate in Supply Chain Management		Changing the number of credit hours

Date Change Approved	Changing the number of credit hours	Changing the number of credit hours	Changing the name of an existing program	Changing the number of credit hours	Eliminating an existing program	Adding a certificate	Adding a certificate	Adding locations
Title of Program	Certificate in Addiction Studies	Certificate in Elder Care Professional	Certificate in Youth Development	Certificate in Fire Service Administration	Associate in Agriculture in General Agriculture	Certificate in Carpentry Specialist	Certificate in Electrical Specialist	Associate of Science in Engineering Science
Institution/Campus/Site	Ivy Tech Community College – All Locations	Purdue University West Lafayette	Ivy Tech Community College – All Locations	Ivy Tech Community College – All Locations	Vincennes University			
	48	49	50	51	52	53	54	55

## COMMISSION FOR HIGHER EDUCATION

Thursday, February 11, 2016

**INFORMATION ITEM C:** 

Media Coverage

Staff has selected a compilation of recent media coverage related to the Commission for December and January. Please see the following pages for details.

## Indianapolis Business Journal Higher Education Officials Want Improvements from Ivy Tech Associated Press Dec. 12, 2015

The Indiana Commission for Higher Educations didn't give Ivy Tech Community College high marks on the academic programs it offers or on how it is doing graduating students.

The commission on Thursday told Ivy Tech, which has 32 campuses throughout Indiana, to review its academic programs by March 1 and to either discontinue or improve those that have low enrollment and graduation rates.

"The commission is confident the recommendations outlined in this report create a strong path forward for Ivy Tech and Indiana's workforce," said Teresa Lubbers, state higher education commissioner.

The move comes after the General Assembly earlier this year didn't allocate any money for any major building projects at Ivy Tech campuses, the only Indiana public college that didn't receive money for any major building projects in the two-year state budget. The Legislature included a provision in the budget bill requiring the commission to review Ivy Tech programs with low graduation rates.

A report released Thursday by the commission said Ivy Tech graduation rates are significantly lower than the nationwide average for community college students. The report said the national average is 58 percent for full-time students and 40 percent after six years when parttime students are included. Full-time students at Ivy Tech graduate at a rate of 26 percent and part times students at a rate of 21 percent after six years.

The commission recommends that Ivy Tech perform an annual program evaluation based on student demand, labor market demand and effectiveness as measured by graduation or "productive transfer." It also recommends coming up with structured course sequences aimed at keeping students moving forward.

The commission wants Ivy Tech to put an emphasis on early career development and come up with ways to help at-risk students by helping them to apply for food stamps and other benefits. The commission wants each student to have a single adviser they can go to for help while they are at the school.

The commission set a Nov. 1 deadline to submit a report on how it has improved its student support.

Commission members say they will ask the Legislature to pass legislation instructing the Department of Workforce Development and the Department of Revenue to work with Ivy Tech

to come up with a way to determine how many graduates are getting jobs and what their salaries are.

## **Greensburg Daily News**

Indiana Awarded Funding and Technical Assistance by the National Governors Association Dec. 11, 2015

On Thursday, the National Governors Association (NGA) announced Indiana as one of six states to receive \$100,000 in funding and technical assistance to participate in the NGA's Policy Academy on Work-Based Learning. Indiana will be able to leverage this grant funding to assist in determining best practices and to create programs designed to align Work-Based Learning experiences to employer demand. More specifically, Indiana will focus on Science, Technology, Engineering, and Math (STEM) industries.

First established by Indiana House Enrolled Act 1002 during the 2013 session of the Indiana General Assembly, the Indiana Career Council, Chaired by Governor Mike Pence, has identified the statewide strategic goal of creating an additional 10,000 Work-Based Learning opportunities in the immediate future.

"I'm thankful that the National Governors Association has chosen Indiana as one of the few states in the country to participate in its Policy Academy on Work-Based Learning," said Governor Mike Pence. "Indiana is leading the way for education reform and ensuring that our high school students graduate college and career ready. This additional funding and technical assistance will help Indiana remain at the top of its class when it comes to work-based learning and career and technical education opportunities."

"I extend my sincere gratitude to the National Governors Association (NGA) for their assistance throughout this entire process and for selecting The Hoosier State as a recipient of these resources," said Steven J. Braun, Commissioner of The Indiana Department of Workforce Development. "As Indiana was one of only six states awarded these funds and related technical assistance, it is clear that we are viewed on a national level as innovators in employer demanddriven workforce development. I would also like to thank all of the participating stakeholders throughout the process for their dedication in securing these resources for The Hoosier State."

Braun noted that relevant stakeholders who offered their support and whose participation was vital to obtaining NGA funds and training resources include The Indiana Commission for Higher Education, The Indiana Department of Education, The Indiana Economic Development Corporation, Ivy Tech Community College, The Indiana Association of Career and Technical Education Directors, Conexus Indiana, The Indiana Afterschool Network, The Indiana Family and Social Services Administration, and The Indiana State Board of Education.

For more information about the National Governors Association and the NGA Center for Best Practices, visit<u>www.nga.org</u>.

## Franklin Chronicle-Tribune Dual Credit Teachers May Get Reprieve: State Will Seek an Extension after Pushback from Schools Dec. 7, 2015

Indiana school districts are hoping they will have more time to allow most of its dual credit teachers to earn more college credits before new standards are put in place.

Districts learned earlier in November, Indiana has begun the process of seeking an extension for the new requirement that high school teachers dual credit courses have both a master's degree and 18 credit hours in their field set in place by the Higher Learning Commission, a regional accreditation organization designated by the federal government to oversee Indiana and 18 other states.

Originally slated to take effect in 2017, an extension could provide as much as five additional years for teachers to meet the new requirements. The Indiana Commission for Higher Education has until Sept. 2016 to file an application for extension, which is supported by Gov. Mike Pence and Superintendent of Public Instruction Glenda Ritz.

Dual credit courses are classes where students earn both high school and college credit for if they pass.

Stephanie Wilson, a spokesperson for the Indiana Commission for Higher Education, said the organization doesn't see the need for the new requirements, calling the idea of teachers having to go back to school when they already have a master's degree but maybe not the 18 credit hours a "burden."

The pushback hasn't changed the Higher Learning Commission's mind in implementation.

"They're not backing down," Wilson said. "In our view, these teachers are doing a good job. Our data show that students in dual credit courses are doing better in high school and in college."

The need for the extension, Wilson said, is so high schools, the state and colleges can have more time to work together so that there are courses teachers could take if needed that fit their schedule, such as summer or accelerated learning classes.

## Indianapolis Business Journal Higher Ed Commission Program Encourages College Dropouts to Return Hayleigh Colombo Jan. 2, 2016

Indiana's colleges and universities want to get dropouts back to class.

More than 750,000 Indiana residents—or about 22 percent of the state's working-age adults—have attended some college but quit before completing their degrees.

They may have left because of work or financial problems or family obligations. The reasons are countless.

But now, state higher education officials are working with schools to make it easier for those Hoosiers to finish their degrees.

They're advocating that financial incentives, flexible schedules and other perks be made available to adults that need the help, with the hope of creating a stronger, more educated workforce and helping Hoosiers advance their lot in life.

"They're thinking about child care, shifts at work, and we need to make sure we've removed obstacles to them along the way," said Higher Education Commissioner Teresa Lubbers. "Our goal is to say, 'Yes, you left, but there are all kinds of reasons why you're a different person now and it could be a good time to come back."

The state has set an aggressive goal: Lubbers wants to see 200,000 of those adults earn degrees by 2020.

The higher ed commission's initiative is set to launch in early spring, targeting students via direct mail or other communications shortly after that. The commission is focused on reaching out to students who left school in the recent past and who already have completed at least a fourth of the credits needed for their degrees.

"In some cases, with just a handful of classes, they are able to find employment or advance in their position," said Ivy Tech Community College spokesman Jeff Fanter. "We know having that certificate or degree is only going to make them more competitive and make Indiana's overall workforce strong."

The effort is coming thanks to a push from the Legislature. The Return and Complete project was established by the General Assembly during the 2015 legislative session. The law requires Indiana colleges to conduct targeted outreach to students who have left their colleges or to work with the commission to reach out on their behalf.

The commission asked the Legislature for additional funding to aid the program but didn't receive it. It plans to ask for funding again in the 2017 session.

"I think we can show some success" by then, Lubbers said.

In the meantime, the commission is using a \$7.5 million grant pool that had previously been used only to help part-time students. The commission is refocusing the grant to the larger adult population.

The help is important. The higher education commission estimates completing an additional year of college can cost Hoosiers nearly \$50,000 in extra tuition costs, lost wages and other costs.

But the impact of doing so can be huge. According to a commission report, college graduates earn an average of \$1 million more over their lifetimes than those without a degree. And college graduates experience half the risk of unemployment as those without a degree. A college degree, the commission says, "provides a passport to prosperity and opportunity."

And the lack of a degree can also cause frustration that Jimmie McMillian, a partner at Barnes and Thornburg, knows well. He spoke in support of the commission's plan at a recent higher education conference. McMillian, originally from Chicago, attended Indiana University before dropping out because of poor grades.

But he was inspired to return and prosper when he realized how much his mother sacrificed for him. He graduated from IU in 1999 and later became a lawyer.

"I went to college to make everyone happy," McMillian said. "I didn't understand college was about getting a job and making yourself better. Then I got it and I had to figure out ... how to get back. I got straight A's and B's my first year back."

The number of college graduates in Indiana also impacts the economy, which makes luring students back to school a statewide issue.

Fewer than 35 percent of the state's nearly 3.4 million working-age adults have earned a twoor four-year college degree, which is below the national average of 40 percent, according to the Lumina Foundation's analysis of U.S Census data. That affects the state's per capita income, tax revenue and standard of living.

Even students who earn degrees aren't doing it on time in many cases. The percentage of students who graduated on time from the state's four-year public colleges was about 36 percent for students who entered college in 2010. The situation is worse at the state's two-year community colleges; for students who entered a two-year college in 2012, the on-time completion rate is just under 6 percent.

To bolster the achievement of individuals and the state, the higher ed commission has asked universities to offer financial and academic incentives to adults who have left school.

The plan is to create an online portal where students can compare and contrast the various options from Indiana institutions, including financial incentives and whether they offer grade forgiveness, flexible schedules and other benefits.

For instance, some colleges are planning to offer limited-time tuition discounts or financial aid to returning adult students. Some will grant clemency for poor grades—called "grade forgiveness."

Ball State University is one of those colleges. It had already started to reach out to students through its "Back to Ball State" program, but will expand its targets based on the commission's goals, said Sam Snideman, the school's director of government relations.

"We don't want your grade from English 101 to be the thing that keeps you away," Snideman said. "If students have had trouble and have been away for a while, when they come back, we're offering the opportunity to wipe the slate clean from bad past academic performance."

Other times, seemingly small financial hurdles have deterred students from going back to school. None of Indiana's public colleges will release a student's transcripts if they have unpaid fines or other charges, according to the commission. ICHE recommends institutions stop that practice for students who owe less than \$250.

Lubbers also encouraged the state's employers to get involved in the effort and "be positive if their employees want to come back" to school. She said offering incentives for employees to return to school and get their degrees would ultimately help the employee and the workforce.

"We think that's really important," she said. "We think it breeds loyalty to a company when employers do that.

## Indianapolis Business Journal Editorial: College Dropouts Deserve Second Chance IBJ Editorial Board Jan. 9, 2016

The Indiana Higher Education Commission's push to lure recent college dropouts back to campus is a smart move that can pay off economically statewide. Experts estimate that, by 2020, two-thirds of all U.S. jobs will require some kind of post-secondary degree or certification. Yet, less than 35 percent of working-age Hoosiers hold such credentials.

Another 22 percent of adult Indiana residents have some schooling past high school but never

finished a degree. Those 750,000 Hoosiers are the higher education commission's target population, particularly younger adults who might be more inclined to return to school because they aren't many years removed from the educational environment. The commission's Return and Complete program will introduce a bevy of initiatives at the state's public colleges to counter adult realities—such as scheduling difficulties, steep costs (an estimated \$50,000 annually in a combination of tuition and lost wages) and child care—that present barriers to returning to finish a college degree.

Targeting young adults, and those who are short of a degree by only a few credits, is wise on the commission's part. The state is most likely to see a return on investment from former students who have the fewest obstacles and the most incentive to finish what they once started. IHCE officials will start reaching out to former students this spring and are encouraging Indiana public colleges to dangle tuition discounts, financial aid and even grade forgiveness. They're also urging schools to waive leftover unpaid fees or fines as bait.

We join IHCE in encouraging these steps. Any concessions within reason that Indiana's higher education institutions can offer former students will pay off for the entire state. It's well-documented that higher education leads to higher income for an individual; in fact, an IHCE report calculated that difference to equal an average \$1 million more income over a lifetime.

But Indianapolis-based Lumina Foundation research has found a broader benefit, too— namely, that "societies with higher educational attainment can expect: greater civic and social engagement, higher rates of voter participation and volunteerism, healthier lifestyles, and less dependence on public assistance."

So far, the legislation passed in 2015 that establishes Return and Complete is an unfunded mandate. IHCE is for now drawing from a \$7.5 million grant pool previously used to help part-time students only, but it plans in 2017 to lay documented success before legislators when it asks again for funding. We hope Indiana's colleges jump on this bandwagon immediately, to ensure that success is evident by next year so we can urge lawmakers to act.



The Indiana Commission for Higher Education has released updated return on investment calculations for colleges throughout the state. Its annual online ROI report includes data on employment, salary, debt and cost. The commission says Hoosiers with at least an associate's degree earn over twice as much on average than peers with a high school diploma.

The <u>commission's ROI website</u> includes snapshots at the statewide and individual public college levels, which officials say are designed to help Hoosiers find degrees with the greatest employment prospects and earnings potential. Its estimator tool allows comparisons by

campus, degree and years after graduation. This year, the report also includes information on short-term certificates and more detailed information on specific majors.

It breaks down information in the following categories:

- Typical cost and student debt level for all Indiana public colleges.
- Most common areas of employment in Indiana for college graduates based on their program of study.
- Median salaries for college graduates employed in Indiana based on their program of study one, five and 10 years after graduation.

Indiana Commissioner for Higher Education Teresa Lubbers says "Indiana's Return on Investment reports give Hoosiers information about a critical aspect of college value - financial cost and payoff. While the value of education beyond high school has never been greater, Indiana's Return on Investment report makes it clear that careful planning about what and where to study and how much money to borrow greatly affects short- and long-term return on investment."

The ROI report data come from the Indiana Commission for Higher Education Data Submission System, federal Integrated Postsecondary Education Data System, Indiana Workforce Intelligence System and 2014 Indiana census figures.

## Associated Press State Awards \$9.6 Million to Help Avoid Teacher Shortages Jan. 6, 2016

Indiana higher education officials have awarded \$9.6 million in grants to help schools that deal with a shortage of quality teaching candidates.

The Indiana Commission for Higher education announced the 13 grants on Wednesday. The money was given to organizations and colleges to pay for programs that recruit, prepare, place and retain teachers in schools with teacher shortages—specifically schools with a shortage of teachers in science, engineering, technology and math.

Indiana recently had a special commission make recommendations on how to stop any shortages of teachers in Indiana, attract more teachers and keep them in classrooms.

This is the second round of grants. They were awarded through a fund created by the Indiana General Assembly in 2013.

Teach for America, Independent Colleges of Indiana and the Woodrow Wilson Foundation were among recipients.

Chicago Tribune Grants Available for 21<sup>st</sup> Century Scholars Nancy Coltun Webster Jan. 9, 2016 Middle schools, high schools and community organizations with students participating in the 21st Century Scholars program may apply for \$1,000 Scholar Success Grants to assist enrollment and program efforts. The deadline is Feb. 15.

The 21st Century Scholar program has been providing needs-based scholarships for four years of full-time tuition and fees at Indiana colleges and universities for 25 years. To date, 30,000 students have graduated from college through this program, said Teresa Lubbers, Indiana's commissioner for higher education.

"Our effort is to make sure the students in the area have an opportunity to sign up for the 21st Century Scholars program and be successful in a college pursuit," said Fred Jackson, regional outreach coordinator for the northwest region. The grants will help the region with seventhand eighth-grade enrollment and assist the Scholar Success Program meant to prepare high school students for college readiness.

"We are probably as focused on the success of the 21st Century Scholars Program as we are on anything at the Indiana Commission on Higher Education," Lubbers said. "The grants will increase awareness of the scholarship program, and this (type of grant) really improves the lives of Hoosiers and the economy of the state to the degree that more students and families will know about the program and more of them will successfully be meeting the terms of the contract."

The grant program is new and makes available \$40,000 of existing 21st Century Scholar Program administrative funds to be divided into five \$1,000 grants for each of the eight regions. One grant will go to a school to assist in enrolling seventh- and eighth-graders into the program. Two grants will go to high schools to assist students with their Scholar Success Program efforts, and two grants will go to community organizations that support enrollment and high school success efforts.

Regional committees with members selected by the commission will review all applications and determine award recipients, Lubbers said.

All seventh- and eighth-grade students in public, charter, freeway or other accredited schools who receive free or reduced lunch can enroll in the 21st Century Scholars Program. But the window closes after June 30 for all eighth-grade students, except students who are in the foster care program. Home-schooled students are not eligible for the program.

Once the students throw open the door to the scholarship opportunity at the middle school level, they make a scholar pledge to complete specific goals at each future grade level. The tasks are designed to help them plan, prepare and pay for college. They also pledge to graduate with a minimum of a 2.5 grade-point average and a Core 40 diploma from a state-accredited high school. They promise they will not use drugs, commit a crime or delinquent acts, or drink underage.

## Indianapolis Star Lawmakers Seeking Solutions to Dual Credit Dilemma for Teachers Chelsea Schneider Jan. 15, 2016

Education policymakers agree new requirements that could force many of the state's dual credit teachers to take more graduate-level courses are a real problem.

Lawmakers already are planning to send a strong message to the Higher Learning Commission showing their discontent over the new rules. The commission accredits colleges in the state, which in turn approve teachers for dual credit courses.

But all signs indicate that — possibly beginning in 2022 — teachers who instruct courses in which students simultaneously earn high school and college credit will need to meet the new coursework standards.

In preparation, lawmakers are proposing a series of solutions to help the state's teaching field fall in line with the Higher Learning Commission's requirements. The accreditor is requiring dual credit teachers to have a master's degree, as well as 18 credit hours in graduate-level courses in the subject matter they plan to teach.

The proposals come as lawmakers say they still intend to push back against the Higher Learning Commission.

State Rep. Wendy McNamara wants state colleges to waive tuition for dual credit teachers who return to obtain the required hours in their subject area. Her proposal could cause an annual combined revenue loss of \$2.9 million to state colleges, according to a fiscal analysis of the bill.

"You always have the conversation of is it their responsibility to absorb it, and then the other position, is it the teacher's responsibility to absorb something out of their control?" said McNamara, a Mount Vernon Republican.

The bill proposes that tuition waivers begin for teachers who enroll in courses after June 30.

Meanwhile, Sen. Dennis Kruse, an Auburn Republican, wants state colleges with education programs to establish a beginning teacher residency and master's degree program. However, Kruse expects the program will need further study before it's enacted.

Kruse said he ultimately plans to send his idea to a study committee, because higher education advocates tell him that establishing such a program would require heavy lifting. Under Kruse's proposal, colleges would create a program to allow beginning teachers to earn their master's degree at the end of their second year in the classroom.

Among the questions colleges say they need answered is how many students would enroll. Kruse said he expects the state will conduct polling to gauge interest.

Under the Higher Learning Commission's requirements, Kruse said, master's degrees for teachers will get "new life," but he doesn't think the accreditor can effectively supersede state law. The state has learned that approximately 70 percent of the state's dual credit teachers don't comply.

"I'm not giving in on that," Kruse said of the new requirements. "I'm still going to be battling that a little bit this session."

McNamara, director of Early College High School in Evansville, will ask lawmakers to approve a resolution in opposition to the Higher Learning Commission's new requirements.

"We have been ranked nationally as one of the states to provide the best pre-college education for kids by the sheer number of dual credits we provide," McNamara said.

"There is no data to assume that having 18 hours of graduate credit in the content area produces better outcomes for a high school student," she said.

The new requirements were originally set to kick in next year, but states now are allowed to request an extension of up to five years. The state plans to make such a request but has yet to be notified of the application process.

The state has to follow the new requirements, or colleges risk losing their accreditations, which are required for them to seek federal financial aid.

Indiana Higher Education Commissioner Teresa Lubbers said her office has worked with McNamara on her resolution. Lubbers oversees the separate Indiana Commission for Higher Education.

For now, the question of how to ensure more Hoosier teachers meet the requirements remains.

"I think that's what some of the legislation is trying to get at," Lubbers said.

Michigan City News-Dispatch
Learning the Ropes
Kim Nowatzke
Jan. 26, 2016

There was plenty of great advice for parents of college-bound students Monday evening at La Porte County Library's College Crash Course.

The expert panel for the night consisted of: Fred Jackson from the Indiana Commission for Higher Education; Janice Whisler, Director of Enrollment and Outreach at Purdue University North Central (PNC); Angie Hall, a current college student at PNC; and Pam Boardman, a mother of two current college students.

Youth Services Librarian Monicah Fratena began the discussion, explaining that the event was designed to "help answer questions you might have as you navigate the college application process."

Finding the right "fit," – the right college — for your student is an important step in the process. Whisler said it may seem obvious, but students need to remember to "choose a school that actually has your major." And, if students are undecided on their plan of study, they should select a college that has plenty of majors to choose from.

Jackson emphasized the importance of college tours where students can better learn about the population of the campus, the extra curricular activities and more; if it's feasible, additional visits to the same school is ideal. He advised parents to carefully consider the distance to the college and how challenging visits back home will be.

"As much as students are trying to assert their independence, they really do want to eat your cooking, pet their cat or dog and sleep in their own beds," Boardman frankly shared.

Hall admitted she was in search of that "magical feeling" while deciding on a college, but that the process is more about "finding a place where you feel you can do your best." She found that the smaller size of the "beautiful PNC campus really suited" her.

And, what about the students that feel the need to transfer?

"If your kid says, 'this isn't right,' you need to listen to them," Boardman shared.

Speaking from experience, she said she was amazed how smooth a transfer can be. She learned about special transfer applications and transfer counselors to help make the transition as seamless as possible.

Whisler pointed out the large number of students that change their major during college, and that the reason many students transfer colleges is because of the cost. Speaking on the subject of admissions, Jackson reminded parents the importance of finding out admission and scholarship deadlines.

For those applications requiring an essay, Whisler admonished parents to take a hands-off approach as "the people that are reading the admissions essays know if the parents are writing them."

The panel discussed how application fee waivers are common for students that qualify for free or reduced lunches at school.

On the subject of ACT and SAT tests that are often required for college admission, the panel talked about the recommendation of taking these during the student's junior year, taking the tests more than once and the importance of preparing for the test.

Fratena mentioned that the La Porte County Library's testing and reference education center contains SAT and ACT online preparation materials, practice tests and online courses in addition to other college and scholarship information. A link to this can be found on the La Porte County Library's Facebook page.

Financial aid is a big part of the college process and Whisler cautioned parents that "college will cost more than you think."

With the March 10 deadline to complete the Free Application for Federal Student Aid (FAFSA), information is needed from the student's and parents' federal income taxes. Whisler explained that if the taxes aren't yet prepared initially estimated tax information may be provided, and alerted parents that some schools may require additional financial information.

However, some schools may have earlier FAFSA deadlines, Boardman cautioned parents, directing them to the colleges' website for information.

In addition, Whisler explained to the parents that, through the FAFSA, all students who meet certain criteria are at least eligible for a student loan; depending on their credit, their parents may be as well.

She reminded parents to carefully consider "what is this going to mean for the student to be repaying these loans" both in the present and in the future.

When filling out the FAFSA, Boardman suggested to parents to "have all your financial materials ready" to make the process less stressful, faster and easier.

The College Crash Course also touched on scholarships. The panel discussed the importance of searching for local scholarships, especially through the student's high school guidance office.

Boardman said many scholarship applications require sealed high school transcripts, so having a few on hand at all times is a good practice. She further pointed out that although a large number of scholarships are for incoming freshman, some are also available for sophomores, juniors and seniors as well.

Other points touched on during the evening's event include Hall's admonition to students to "be willing to ask for help."

"Managing your time is important," Jackson added while Whisler stressed the need for students to "be responsible."

Chalkbeat Indiana
Plans to Solve Indiana's Dual Credit Problem Still Coming Into Focus
Shaina Cavazos
Jan. 27, 2016

Indiana educators and policymakers are still looking for a way to save thousands of popular courses that allow students to earn college credits while still in high school. Indiana high schools are required by law to offer dual-credit courses, but the classes have been endangered by new rules mandating their teachers to have advanced degrees in the subjects they teach.

The state's dual credit advisory council met today to figure out how they might quickly shore up the education of thousands of high school teachers to keep the college-level classes going, but the council is still looking for guidance from the national organization that accredits Indiana colleges and universities for these programs.

At first, the new rules from the Higher Learning Commission that required dual-credit teachers to have a master's degree or 18 credit hours in their subject area were set to take effect in 2017, but the commission in November told states they could apply to extend the deadline to 2022.

Since then, the commission has been pretty quiet on letting schools know what their next steps should be, said Teresa Lubbers, who heads Indiana's Commission for Higher Education.

"I was very hopeful today that we'd be able to give more information," Lubbers said. "We have not heard back from HLC again, and what we're waiting for is on what basis do we send them this application for this extension that we want for 2022."

Today, the state advisory council discussed proposed solutions, including cooperating with state universities to pay teachers' tuition and develop plans to accelerate teacher education. There are also a few bills moving through the legislature that could help restore incentives for teachers who pursue graduate courses.

The rule change is intended to make sure teachers of college classes are uniformly and highly qualified, but for Indiana and other states across the country, it brings with it some serious consequences.

Almost 75 percent of Indiana's existing 2,531 dual credit teachers don't completely meet the new requirements, Lubbers said. About 26 percent of dual credit teachers have both master's degrees and the subject-specific credits, and 75 percent already have a master's degree in general. But many of those teachers might have a master's in education, which doesn't include the subject-area classes the commission is looking for.

Among the legislative measures under way to address the issue is a bill from Rep. Wendy McNamara, R-Mount Vernon, that would allow teachers with master's degrees already teaching dual credit classes to get free or reduced tuition for college credits, up to 18 credit hours per person. The bill, House Bill 1370, passed the House Education Committee on Tuesday.

"I think the biggest challenge with this piece is one, we're just trying to ... maintain or keep what we have, but the other piece is the incentive to go back to school," McNamara said. The decision to raise the bar for dual-credit teachers comes at a time when Indiana has veered away from pushing teachers to earn master's degrees — and when some districts say they are having trouble finding enough teachers at all.

That could be even more motivation for lawmakers to put incentives for extra education back on the books, said Janet Boyle, the executive director of the Center of Excellence in Leadership of Learning at the University of Indianapolis. Many of those incentives were removed in 2011 as part of a broader overhaul of how Indiana teachers are paid.

Senate Bill 10 would allow schools to pay teachers extra for getting master's degrees or graduate credits, and up to half of that extra pay could be added outside of union negotiations to the teachers' base salaries. The other bill, Senate Bill 382, proposes a mentoring and residency program to give teachers time to earn a master's degree, but bill author Sen. Dennis Kruse, R-Auburn, said last week that the bill likely would go up for a summer study committee.

The legislation is geared mostly toward teachers who are already on their way to credentials, and it doesn't necessarily take into account teachers who are starting at square one without any advanced education, said Todd Bess, executive director of the Indiana Association of School Principals. The state also needs to consider that some currently qualified teachers could retire, he said, reducing the pool of available teachers further.

"If (25 percent) exist, and (25 percent) aren't incentivized, we've lost 50 percent of our dual credit teachers, and that's going to be another huge step back," Bess said.

Support from Indiana colleges and universities is essential as the state tries to find ways to make sure all dual credit teachers have the required education to teach their classes.

Mike Beam, director of pre-college programs at Indiana University, said his department is starting a pilot where a college faculty member would partner with a dual credit teacher to structure and deliver course content. The partnership could be years-long, allowing the teacher to take more time to earn a degree while still working full-time.

"We think the plan will allow (teachers) to earn those graduate credit hours in a much more humane timeframe," Beam said.

Indiana law requires high schools to offer dual-credit courses as a way to ensure that graduates are prepared for college, and high schools partner with local colleges to design the courses and decide who can teach them.

Because of the looming deadline, there's some urgency around finding ways to get by until teachers can be properly trained. Until then, schools could look into bringing back qualified retired teachers and identify fully qualified teachers who aren't currently teaching dual credit.

But long-term, the council will also address how Indiana could again support a pay system that rewards teachers for extra education and encourages them to go back to school. For now, Lubbers said, the council plans to survey teachers and universities and calculate how much some of the proposed solutions might cost.

"I think we need to be very thoughtful on this," Lubbers said. "We need to consider not only the impact of what it would (cost) for us to provide incentives for tuition, but then, (how) to incentivize teachers teaching dual credit classes on an ongoing basis."



When it comes to students completing their college degrees, the north-central region of Ivy Tech Community College has a lot of catching up to do.

The region, which includes campuses in South Bend, Goshen and Warsaw, had the lowest overall six-year completion rate in the state for students enrolled between fall 2006 and 2008. Just 18.6 percent of students earned a degree or a certificate from Ivy Tech or another institution within six years.

By comparison, six-year completion rates in other regions ranged from 20.7 percent (northeast) to 28.8 percent (Bloomington area).

When Ivy Tech was designated Indiana's statewide community college system more than a decade ago, enrollment surged. In recent years enrollment has dropped 25 percent. Ivy Tech is still well below the national average of 58 percent for full-time community college students finishing in six years.

Why the problem in completing a college degree? According to students, the reasons range from transferring to another college to taking a semester off to having achieved their educational goals to personal reasons.

And as reported Sunday by Tribune staff writer Margaret Fosmoe, there simply isn't enough interest by some students to justify continuing to offer some programs. Right now the college is compiling statewide enrollment and graduation data, and eventually will be asked to provide a rationale for keeping or eliminating programs with low enrollment or completion.

As the state's community college system, Ivy Tech plays a critical role in preparing students for the workforce in local communities. If students are not completing their course of study, that can impact the potential pool of employees businesses have to choose from.

A little more than a month ago the Indiana Commission for Higher Education approved several recommendations intended to ensure those with Ivy Tech degrees and certificates find employment. The recommendations include evaluating programs based on student and labor market demand, targeting students to help them complete their programs and helping those students transition to four-year colleges.

Besides those steps, Ivy Tech north-central region officials said they are trying to provide students with a "one stop" approach to help with admissions, financial aid and academic advising, all important areas to boost retention and completion rates.

Helping students complete their degree or certificate program must be a priority for this region. Continuing the status quo is not an option.