

Council of Chief Academic Officers

Wednesday, February 17, 2011

9:30 a.m. – 10:30 a.m.

Kathy Rupp Conference Room

Curtis State Office Building

Reconvene at

12:00 p.m. – 1:15 p.m.

Kathy Rupp Conference Room

Curtis State Office Building

1000 SW Jackson Street Suite 520

Kansas Board of Regents

MINUTES

The Council of Chief Academic Officers met on Wednesday, February 17, 2011 in the Kathy Rupp Conference Room, Curtis State Office Building in Topeka, Kansas at 9:30 a.m. and reconvened in the Kathy Rupp Conference Room at 12:00 p.m.

Members Present:

Larry Gould, Provost, FHSU

Jeff Vitter, Provost and EVC, KU

April Mason, Provost, KSU

Lynette Olson, Provost, PSU

Allen Rawitch, VCAA, KU Med Center

Tes Mehring, Provost, ESU

Rick Muma for Gary Miller, Provost, WSU

Randy Pembroke, VPAA, WU

Gary Alexander, KBOR

Others Present:

Ruth Dyer, KSU; Kim Krull, Cloud CC; Alysia Johnston, Coffeyville CC; Jim Williams, ESU; Barbara Romzek, KU; and Keith Pickus, WSU

Staff Present

Jean Redeker, KBOR, Jacqueline Johnson, KBOR and Joan Warren, KBOR

Approve Minutes of January 19, 2011

Tes Mehring moved and Randy Pembroke seconded the motion to approve the Minutes of January 19, 2011, as submitted. No discussion followed. Motion carried.

FHSU – Request for Approval of a Bachelor of Science in Information Systems Engineering (15.1299) (SECOND READING)

Comments and concerns were sent to Fort Hays State University regarding its proposal for a new Bachelor of Science in Information Systems Engineering (15.1299). Larry Gould, FHSU, responded to the concerns and maintains the program. Fort Hays State University feels this program is unique and will provide students will access to this type of program in western Kansas. Support for the program will come from sources other than Kansas Connect.

The university letters regarding concerns about the program are attached to these minutes.

Discussion followed:

- It was suggested that this proposal could be an option under an existing program
- Engineering students have to have an accredited degree
- A better CIP might be the Telecommunications Engineering - 14.1004

Tes Mehring moved and Larry Gould seconded the motion to recommend approval to the Council of Presidents. There was no further discussion. A tie vote occurred.

Program Requests

WSU – Request to Change the Name of the Master of Arts in Gerontology to the Master of Arts in Aging Studies (CIP 30.1101)

Larry Gould moved and Tes Mehring seconded the motion to approve the WSU request to change the name of the Master of Arts in Gerontology to the Master of Arts in Aging Studies (CIP 30.1101). Motion carried.

Campus Input on the Retirement Research Survey (FHSU)

COCAO discussed aspects of the survey and potential benefits. This is a voluntary survey and does not require endorsement from the universities. The researchers' plan is to contact retirement age staff with a survey that is strictly voluntary.

Council members asked that when information is distributed to COCAO that the intent for distribution is clear.

Other Business

Agenda Items when COCAO reconvenes

- (1) Regent McKechnie will meet with the Council to provide information concerning the Transfer and Articulation Task Force intent and progress.
- (2) Request related to low enrollment programs
- (3) Economic Impact Study that is on the Board Agenda

Concerns regarding transfer and articulation were discussed:

- Moving too quickly
- Proposed recommendations do not match input
- Need clarification of the scope of the problem
- Need for transparency of policies/procedures
- Establish a procedure that works for the system
- Begin with a workable foundation
- How do you extract the role of “good advising”
- What should the student’s role be
- Affordability
- Available data
- Monitoring ability
 - consistent course numbering
 - set up a bridge system
 - Core Competency Project – maybe begin work on 8 programs

- Faculty primacy
- An appeal option to review each situation

Meeting recessed at 10:55 a.m.

Meeting reconvened at noon in the Kathy Rupp Conference Room

Low Enrollment Programs

The Council discussed low enrollment programs and stated how reporting on interdisciplinary programs is difficult. Where do institutions report the students enrolled in interdisciplinary programs? There are multiple variations on programs that have low enrollment but are essential.

The Council mentioned an example of programs that do not appear cost effective - music programs appear to cost more than they are worth. COCAO asked, how is the formula determined for cost per credit hour?

Transfer and Articulation

Regent McKechnie met with the Council of Chief Academic Officers concerning transfer and articulation.

This year the Regents visited the community colleges. At each Regent's visit problems with transfer and articulation was mentioned. In response, a Transfer and Articulation Task Force was appointed to research the transfer and articulation issues and make recommendations to the Board of Regents. The Task Force has met twice and discussed various aspects of the issues. Some of the observations made are the need for transparency regarding the transfer and articulation policies and procedures; procedures for appealing decisions; and a systemwide process. The quality of advising that students receive regarding the transfer and articulation of credits has been discussed, as well as student responsibility. Technology, using one portal for transfer and articulation information systemwide, has been mentioned.

The Task Force will meet Thursday, February 17th in the Kansas Board of Regents Board Room. They will discuss draft recommendations. The Task Force is working to find a process for improving transfer and articulation, a method of justifying decisions made – accountability, appeal process, and transparency.

Meeting adjourned at 1:15 p.m.

Sincerely,

Jeff Vitter
Provost and Executive Vice Chancellor
University of Kansas

January 24, 2011

Dr. Gary Alexander
Vice-President for Academic Affairs
The Kansas Board of Regents
1000 SW Jackson Street, Suite 520
Topeka, KS 66612-1368

Re: B.S. Degree in Information Systems Engineering at FHSU

Dear Dr. Alexander:

I asked Glenn E. Prescott, Professor and Chair of KU's Department of Electrical Engineering and Computer Science, to review the proposal for the proposed degree program from Ft. Hays State University and to discuss it with several key individuals within the department. They focused primarily on the curriculum and the potential accreditation issues associated with this program as it is described on the Board of Regents web site.

The BS in Information Systems Engineering (BSISyE) degree fits between the B.S. in Information Technology (BSIT), which is less technical, and the B.S. in Computer Science (BSCS), which is more technical. This particular program is very much a computer science program with a built-in specialty in the study of information systems. Clearly, the BSCS is a broader program of studies, and graduates would qualify for many jobs that the BSISyE graduate would not.

The Information Systems Engineering degree is found in only a few schools in the US as a graduate program of studies. After a fairly extensive search of the web, we found no undergraduate programs in Information Systems Engineering, and that was surprising to us. This program should not be confused with Information Systems, which is an academic program normally found in business schools.

Program Content: The Information Systems Engineering curriculum is focused on the generation, transmission, processing, storage and protection of information, which is a subset of computer science. Graduates of this program would be involved in the design and development of databases, information storage and retrieval systems, and computer networks. They are not engineers of hardware. There is nothing in the FHSU degree program that would prepare a graduate of this program to design and implement any of the hardware they would use in their profession. They are primarily engineers of software that pertains in some way to information. Information Systems Engineers will fit well within large companies where they can design -from a systems perspective -the overall information technology infrastructure. They would not normally be involved in the design of a large enterprise software program (such as PeopleSoft, for example) or developing the software system to land a vehicle on Mars.

Accreditation: Looking at the curriculum proposed by FHSU, there is sufficient math and physics to support the study of an engineering discipline. However, it appears that most of the courses in the curriculum don't require calculus at any level, which is inconsistent with an engineering program. Several of the courses in their curriculum are also part of a certificate program in internetworking. This led us to question the accreditation issues that might be involved here.

One difficulty the BSISyE program will face is that it will have to satisfy two accreditation bodies within the Accreditation Board for Engineering and Technology (ABET) – the Computing Accreditation Commission (CAC) and the Engineering Accreditation Commission (EAC).

The FHSU proposal articulates a curriculum and assessment plan that should satisfy the general accreditation requirements for CS/IS/IT. However, if it is evaluated specifically as an IS program (instead of just the general CS requirements), then accreditation may be difficult to achieve. Furthermore, there may be difficulty in achieving accreditation as an engineering program because of a lack of engineering courses.

General Observations: There is no doubt that Kansas is in desperate need of more IT professionals. Companies are begging for more graduates and FHSU serves an area of Kansas that other Universities do not. As such, FHSU needs to provide a rich set of opportunities for their students and potential employers in the information technology industry.

However, it is not clear to us what the BSISyE degree provides that a CS degree does not. The issue in Kansas is not the number of CS-type programs, but that they are undersubscribed. We need more students in CS, not more programs. The FHSU proposal says nothing about how they will fill the program or why it will fill when other similar programs are undersubscribed. The proposal names a collection of employers who would hire students from this program. However, few if any of their support letters come from those companies. Most of the support letters come from economic development organizations and alumni, with a few from local companies.

We believe that this program will compete with CS degrees at KU, K-State and WSU, to some extent. The potential employers identified in the proposal traditionally hire CS/CoE students and not IT students. Thus, if the information technology industry is interested in graduates of the proposed BSISyE program, then this program must either produce a new class of employees that these companies need, or produce graduates that are equivalent to a CS graduate.

Finally, we note that the FHSU proposal anticipates significant funding from the state of Kansas. In these tight budget times, it is unclear whether launching a new and unaccredited engineering program would be the best investment of limited state funds. The three existing accredited engineering programs within the state could better leverage the funds to build their enrollments.

Please contact me if you need further information.

Sincerely,

A handwritten signature in black ink, appearing to read "J.S. Vitter", written in a cursive style.

Jeffrey S. Vitter
Provost and Executive Vice Chancellor

JSV:lb

**Kansas State University Response to the Fort Hays State University
Information Systems Engineering ISE Proposal
February 4, 2011**

From the Fort Hays State University (FHSU) proposal to the Kansas Board of Regents (First Reading, 01/19/2011): FHSU is requesting approval of a Bachelor of Science in Information Systems Engineering (ISE) (CIP: 15.1299). This program is to be housed in the Department of Informatics in the College of Business and Leadership.

Concerns and Issues:

1. **Overlap With Current Programs:** The proposed degree is very similar to the Computer Science (CS) and Information Systems (IS) degrees (particularly the IS degree) offered at the K-State Manhattan campus, and there are numerous similarities in technical course content to the Computer Systems Technology degree offered at the K-State Salina campus. With the exception of possibly two courses, the courses listed in the FHSU ISE degree program are similar to the required and elective courses in the IS undergraduate degree program at K-State. In addition, other K-State CIS courses, which are required in the IS degree at K-State, provide more in-depth foundation in computer logic and hardware. Hence, the proposed FHSU ISE degree has significant overlap with existing degree programs at both the K-State Manhattan and Salina campuses and would duplicate what students can already study at K-State.

The K-State CS and IS degree programs have about 200 and 45 students, respectively. There is plenty of capacity in our current programs to accommodate additional students. The smaller enrollment in the IS degree program also is reflective of the lower market demand for this degree. It is questionable that there is a sufficient demand for IS graduates to support another similar degree program in Kansas.

2. **Limited State Resources:** Based on the suggested degree name, FHSU is proposing to offer an "engineering" degree. To our knowledge, FHSU does not have any other engineering or computer science programs. Providing an engineering degree requires appropriately credentialed faculty members, specifically trained support staff, substantial facilities, equipment and other infrastructure needs. These items are not inexpensive, as is noted in the FHSU proposal. However, because of the budget cuts that have been imposed at our institutions over the last few years and the limited state resources, any effort to expand the numbers of engineering graduates in our state should be done through existing engineering degree programs and colleges such as those at K-State, KU, and WSU.

3. **Accreditation challenges:** Under item 4 in the proposal, FHSU states "No Kansas institution offers an Information Systems Engineering degree". Under item 11, FHSU also states "The program will not seek accreditation until the program moved from initiation to maturity. A program goal will be to seek accreditation through the Accreditation Board for Engineering and Technology (ABET) after the first program review". ABET has four accreditation commissions: Engineering Accreditation Commission (EAC); Computing Accreditation Commission (CAC); Technology Accreditation Commission (TAC); and the Applied Science Accreditation Commission (AAC). Degree programs are accredited based upon program name, curricular content, faculty credentials, available facilities, and supporting infrastructure. Based upon the content of the proposed degree program, the likely accreditation commission would be the CAC. However, neither the CAC nor any of the other commissions have any criteria for an "Information Systems Engineering" degree. The CAC has criteria for Information Systems degrees (or similar names but not with the word "engineering"), and the EAC has a criteria

for a "Systems Engineering" degree (but not Information Systems Engineering). The reason none of the other Kansas Institutions offer an Information Systems Engineering degree is likely because this does not match up with any of the current program options for accreditation from the different ABET commissions.

The CAC criteria for IS degrees also state that "... some full-time faculty, including those responsible for the IS curriculum development, must hold a terminal degree in information systems." The FHSU proposal states that the faculty from mathematics and physics will provide the academic base, and that "... existing Computer Science, Informatics, and Management Information Systems faculty will contribute important coursework." From this description, it is not possible to determine whether the persons responsible for the curriculum design meet the CAC-ABET criterion that requires those individuals to "hold a terminal degree in information systems."

It is unclear how FHSU could accredit this program through ABET. ABET accreditation of any engineering or computer science related program is required in order for students to seek professional licensure. It also is very important to employers, since it ensures that the degree programs meet certain standards.

NOTE: We contacted the University of Maine to learn more about their Information Systems Engineering degree program, since we knew they had stopped offering their ISE degree in 2007. They offered this degree for a number of years, but never had much student interest (less than 30 students). Their ISE degree was previously accredited, but because of the name, it was accredited under both the CAC and EAC of ABET. This was both expensive and time consuming. Furthermore, their ISE program had substantial overlap with their Computer Science, Software Engineering, and Computer Engineering programs. These factors led to their decision to discontinue the program. We are aware that other schools (i.e. John's Hopkins and NYU-Poly) offer a similar program, but only as a graduate degree (MS) program option.

4. CIP Code: The CIP code assigned by FHSU for this proposed degree does not appear to be the appropriate one for an engineering degree.



WICHITA STATE
UNIVERSITY

ACADEMIC AFFAIRS
AND RESEARCH

Office of the Provost
and Vice President

COPY

Lawrence Gould
Provost
Fort Hays State University
600 Park
Hays, KS 67601-4099

January 25, 2011

Dear Larry,

Thank you for the thoughtful discussion during the COCAO meeting on Wednesday, January 19, 2011 regarding the Bachelor of Science in Information Systems Engineering, FHSU is proposing. As I indicated, we have serious reservations about this program. I am providing you with a summary of our observations regarding your proposal.

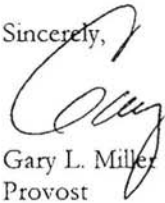
- It is our understanding that engineering and information system programs will be housed at the three Kansas research universities. Your statement during the meeting that, in making this proposal, FHSU is requesting an exemption to that understanding is unsettling in these difficult economic times. We believe that the most efficient way to meet the engineering needs in the state is to continue the growth of the three ABET accredited engineering programs.
- WSU (along with KU and KSU) has ABET accredited degree programs in computer engineering and computer science. There is significant overlap with these degrees in your proposal.
- Engineering programs are supported by extensive and costly infrastructure which includes specialized teaching and research faculty (required for accreditation). This infrastructure already exists at the research universities.
- We have extensive experience in working with potential employers of engineering graduates. Employers needing expertise in information systems hire graduates with degrees in information systems or computer engineering/computer science. To our knowledge, there is no accredited discipline in "information systems engineering." In fact, in order to be accredited by ABET, the proposed degree program would need to satisfy both the Computing Accreditation Commission and the Engineering Accreditation Commission Criteria as it combines "information systems" with "engineering."
- An essential piece of a successful engineering program is placement of students in the workplace for hands-on experience. WSU already has highly developed programs to accomplish this. For example:
 - WSU houses the only higher education-based Cisco Technical Research Center in the world. This facility provides student experiences in networking, computer storage, and information systems.
 - WSU heads-up the most comprehensive K-12 STEM effort in the state through the "Project Lead the Way" program funded by Knight Foundation/WIRED grants.

- The WSU Work-Based Learning Program is one of the largest in the region and has extensive experience placing undergraduate engineers.
 - Our close partnership with Wichita Area Technical College at the National Center for Aviation Teaching is designed to specifically enhance engineering training in Kansas.
 - The three research campuses with similar degree programs provide ample opportunities for graduate placement in the Wichita and Kansas City metropolitan job markets, where most of the employers listed in your proposal are located.
- Funding for the program is to come from request for an allocation of state funds. Such a request for funds for a program with substantial overlap could draw precious funds from three highly productive engineering programs already existing in the state at a time of great resource limitation. A better use of funds would be to enhance the existing programs in the state, and consider offering those programs in a collaborative fashion with FHSU.
 - The CIP code 15.1299 in the proposal refers to a degree program in Computer Engineering Technology. Engineering degrees are included with classification numbers starting with code 14.

I look forward to working with you to support your programs without promoting another engineering program in Kansas. One possible approach is to consider your program an interdisciplinary computer science track outside the framework of engineering.

I appreciate your consideration of these comments.

Sincerely,



Gary L. Miller
Provost
Vice President for Academic Affairs and Research

GLM/lcm

C: Don Beggs
Gary Alexander
Jeff Vitter
April Mason
Zulma Toro-Ramos
Rick Muma
Fritz Hemans

Fort Hays State University

February 10, 2011

Dr. Gary Alexander
Vice-President for Academic Affairs
Kansas Board of Regents
1000 SW Jackson Street, Suite 520
Topeka, KS 6612-1368

Re: Objections and Responses to the Fort Hays State University Information Systems Engineering Proposed Bachelors of Science Degree

Dear Dr. Alexander,

I have tried to capture the objections posed by members of the Council of Chief Academic Officers to the Fort Hays State University Information Systems Engineering Proposed Bachelors of Science Degree and have provided comprehensive responses to each question or concern. Please see these below.

1. Duplication

Response: Dr. Jeffrey Vitter from the University of Kansas's letter summarizes Fort Hays State University's belief regarding the argument of program duplication in stating:

The Information Systems Engineering degree is found in only a few schools in the US as a graduate program of studies. After a fairly extensive search of the web, we found no undergraduate programs in Information Systems Engineering, and that was surprising to us. This program should not be confused with Information Systems, which is an academic program normally found in business schools.

The proposed program would be unique to Kansas and the Great Plains Region.

2. Support Monies

With the abandonment of the Kansas Commitment, the new initiative is the Engineering Expansion Program funded by \$1 million is to be used for existing programs that actually need expansion. Adding a new program doesn't make sense and cuts the pie four ways.

Response: Fort Hays State University is not seeking funding from the Engineering Expansion Program. Fort Hays State University is not seeking to build Civil, Mechanical, Manufacturing, Nuclear, Aeronautical, Chemical, or other facility and laboratory expensive engineering programs. It is proposing a program that aligns with the university's unique state-wide mission in the integration of telecommunications and computing. This program builds on FHSU's nationally recognized excellence in Telecommunications and Information Assurance.

Information Systems Engineering is designed to grow the economic pie as it is aligned with important needs in the Kansas and national economy.

3. Proposal Budget

The current budget in the proposal is outdated and depends on the original \$750,000 in the Kansas commitment.

Response: The Information Systems Engineering program leverages current Fort Hays State University programs including Pre-Engineering, Computer Science, Mathematics, Computer Networking, and Information Assurance. FHSU's pre-engineering program supports other engineering programs –both in-state and beyond. Students can currently take the first two years of an engineering degree at FHSU and subsequently transfer to an existing engineering program. New students entering the program can be accommodated in current pre-engineering classes for the next two years. This comment is correct that the proposed budget is outdated. Growth and ramp-up will have to be more gradual and more dependent upon private sector support, tuition, and reallocation of FHSU monies instead of launching a more aggressive full-bore program immediately. Information Systems Engineering relies most heavily on intellectual capabilities and relatively inexpensive computing, networking, serving, and information assurance tools.

As noted in the program proposal, the FHSU Information Networking and Telecommunications, Information Assurance program, and other information science programs have benefited from substantial and consistent private sector support. Since the program proposal was submitted, Juniper Networks has approached FHSU. FHSU is the only one of the seven Kansas universities to initiate a new Juniper partnership for education and research. This supplements current academic partnerships with Cisco Systems, Oracle, NDG, Rural Telephone/Nex-Tech and other organizations. The Department of Informatics' Computer Networking and Information Assurance programs have received more than \$2 million dollars worth of equipment and software from industry partners over the last decade. The largest donations occurred in 2008 with more than \$1.28 million in equipment donated in a single year as Fort Hays State ramped up its Information Assurance program. Key donors to that program have included Cisco Systems, Oracle, Juniper, Nortel, Adobe, Nex-Tech, and Sprint. FHSU will continue to pursue private sector support.

4. Alignment/consistency

The degree claims to be built on a networking architecture concept, but the language of networking is not reinforced throughout the proposal.

Response: Fort Hays State University has unique intellectual and program assets in the area of networking architecture and intends for networking to be the fundamental asset in developing a unique, focused, and world class engineering program. If the language needs reinforcement to convey the networking emphasis, FHSU can make that change.

5. Market

The proposal lacks evidence that there is clear student demand for this type of degree. In fact, according to WSU, there is evidence of a declining demand for this type of engineer.

Response: National analyses, Kansas data, and Fort Hays State University experience seem to contravene the WSU claim. *The Bureau of Labor Statistics, Occupational Handbook, 2010-2011 Edition*, Bureau of Labor Statistics (2010) projects that the second fastest growing category of occupations is “Network Systems and Data Communications Analysts.” Job growth in this category is projected to increase 53% between 2008 and 2018. This is projected to be the 2nd fastest growing occupational category in United States over the time period. The median 2008 wages for this category are \$71,100. 155,800 new jobs are projected to be created in this occupation category. A closely related occupational category – “Software Engineers, Applications” is projected to have a 34% increase in jobs resulting in an increase of 175,100 new positions with an average salary of \$85,430. This category is projected by the Bureau of Labor Statistics to be the 15th fastest growing occupational category. Both categories require a bachelor degree.

The Bureau of Labor Statistics specifically states:

Two of the fastest growing detailed occupations are in the computer specialist occupational group. Network systems and data communications analysts are projected to be the second-fastest growing occupation in the economy. Demand for these workers will increase as organizations continue to upgrade their information technology capacity and incorporate the newest technologies. The growing reliance on wireless networks will result in a need for more network systems and data communications analysts as well. Computer applications software engineers also are expected to grow rapidly from 2008 to 2018. Expanding Internet technologies have spurred demand for these workers, who can develop Internet, intranet, and Web applications. Bureau of Labor Statistics (2010)

The Kansas Department of Labor similarly projects robust demand for these two occupational categories. In its projections for employment growth between 2006-2016, it projects 54.7% growth for “Network Systems and Data Communication Analysts” with aggregate growth of 1096 jobs. A similar category of “Network and Computer Systems Administrators” is projected to have 34.9% growth with aggregate growth of 1421 jobs. “Computer Software Engineers, Applications” are projected to have 44.7% growth with aggregate growth of 1,191 jobs. “Computer Software Engineers, Systems Software” are projected to have 35.3% growth with aggregate growth of 772 jobs. All of these positions are described as requiring a Bachelor’s degree.

During the last week of January, 2011, the *Hays Daily News* carried classified advertisements from three different organizations seeking network administrators. These included Nex-Tech, Golden Belt Telephone, and Scott County Hospital. Information Systems Engineers are typically employed at a higher strata than network administration; however, these advertisements illustrate the demand that exists even in rural Kansas for network architecture and engineering.

The employers listed in the program proposal are employers who currently hire students from FHSU information science programs: Computer Science, Management Information Systems, and Information Networking and Telecommunications. Employers have indicated that the value of being able to employ Information Systems Engineers who can design from a system perspective – the overall information technology infrastructure will be an important asset to them.

6. CIP Code

There is no CIP code for this degree. The CIP Code is actually a computer (not information) engineering identifier.

Response: Agreed. There is no CIP code that exactly fits this degree. New and innovative programs sometimes develop before an accounting/identification statement like CIP Codes expand. Fort Hays State University attempted to submit a CIP Code as closely aligned as possible. If this addresses the objection, perhaps a better code at this time would be CIP 14.1004 Telecommunications Engineering:

Definition: A program that prepares individuals to apply mathematical and scientific principles to the design, development, and maintenance of telecommunications technology, networks, and systems. Includes instruction in telecommunications, computer networking, communications networks and systems, signals, circuits, fiber optics, and wireless systems and technology.

7. Employability

Engineering students do not get hired unless programs are ABET licensed/qualified. The plan for ABET qualification for this degree is unclear because there is no ABET category for this type of degree.

Response: This curriculum is designed to meet ABET standards for accrediting Computing Programs and ABET standards for accrediting “Electrical, Computer, and Other Similarly Named Engineering Programs.” We respect feedback such as that received from the University of Kansas. In accord with KU’s observation, FHSU is willing to substitute additional engineering courses and to make other necessary modifications. It should be noted, however, that current FHSU Information Networking and Telecommunications students are frequently hired as engineers without graduating from an engineering program – much less an accredited engineering program. One of these graduates recently became Cargill’s youngest Senior IT Manager in the company’s history. FHSU appreciates the value of ABET accreditation. Thus, the proposed program will be submitted for accreditation as quickly as it is eligible in order to provide quality assurance and program recognition. But obviously, programs with a specialized accreditation opportunity have to approved by the Regents before they can seek accreditation.

8. If you don't receive any of the state initiative money, how does FHSU expect to support this program?

Response: See the FHSU responses to objections 2 and 3.

9. WSU emphasizes the need for engineering students to have hands on experiences and points to WSU initiatives.

Response: FHSU applauds WSU's efforts and is pleased to point out that on a given academic year, FHSU has students from its information sciences programs interning at Nex-Tech (usually ten or more), Eagle Communications, Hays Medical Center, Pioneer Communications, Sunflower Telephone, Cerner, Koch Industries, Cargill, Apple, Cisco Systems (Research Triangle, Denton, Texas, and San Jose, California), NDG, Zappos.com, Spirit, and in a variety of other organizations. The proposed Information Systems Engineering program will mandate that all of its students participate in an internship as a condition of graduation. With the richness of FHSU industry partnerships, internship placement should not be a difficulty.

We appreciate the thoughtful feedback provided by the other Kansas institutions with history and experience in this academic programming area. As the three institutions with existing engineering programs seek to make a case to public policy makers that the state lacks engineers and engineering capacity, FHSU believes that initiation of a unique program that does not directly compete with any existing program and which fits a developing industry niche in an underserved region is a very compatible initiative. More opportunities for Kansas citizens to choose and gain a credential in engineering seems like a logical and politically appealing response. In other words, an accessible and affordable addition to the state's engineering program menu in central and western Kansas should broaden public and industry support for engineering in all of Kansas.

Sincerely,

Larry Gould
Provost