



Memorandum

To: University Senate

From: Daniel A. Mendelsohn, Chair
Council on Academic Affairs

Date: October 29, 2008

A PROPOSAL FROM THE COUNCIL ON ACADEMIC AFFAIRS TO CHANGE THE NAME OF THE DEPARTMENT OF INDUSTRIAL, WELDING, AND SYSTEMS ENGINEERING TO THE DEPARTMENT OF INTERGRATED SYSTEMS ENGINEERING

WHEREAS the Department of Industrial, Welding, and Systems Engineering has administered two programs Industrial and Systems Engineering and Welding Engineering since the merging of their respective departments in 1994; and

WHEREAS the current name implies that the department's focus is on industrial welding systems, leading to confusion among the department's academic peers; and

WHEREAS the proposed name better represents the interdisciplinary nature of the department's two programs; and

WHEREAS the proposal has the support of the College of Engineering, and the concurrence from the Fisher College of Business; and

WHEREAS the proposal was approved by the Council on Academic Affairs on September 15, 2008,

NOW THEREFORE BE IT RESOLVED that the University Senate approve the proposal from the Department of Industrial, Welding, and Systems Engineering to change its name to the Department of Integrated Systems Engineering, and respectfully request concurrence from the Board of Trustees.

Cormier, J. Briggs

From: Smith, Randy
Sent: Monday, September 15, 2008 4:39 PM
To: 'Julie Higle'
Cc: Cormier, J. Briggs; 'Kay Halasek'; Smith, Randy; Alutto, Joe; Zacher, Chris; Gillespie, Josh; 'allen.697@osu.edu'; Baeslack, Bud; 'Gregory Washington'; 'Stu Zweben'; Osmer, Patrick; 'Elliot Slotnick'; 'D. A. Mendelsohn'; 'Mangum, Stephen'; 'dickhaut.1@osu.edu'; Myers, Brad (.7); 'mccauley.1@osu.edu'; Anderson, Carole (.32)
Subject: Department Name Change

Julie:

The proposal from the Department of Industrial, Welding, and Systems Engineering to change its name to the Department of Integrated Systems Engineering, was approved by the Council on Academic Affairs at its meeting on September 15, 2008. Thank you for attending the meeting and responding to questions/comments.

The proposal now will be sent to the University Senate for action at a forthcoming meeting. I will contact you once I know which meeting it will be. The proposal will be presented by the Chair of the Council, Professor Daniel Mendelsohn, but it will be important for you and someone from the College Office to be in attendance to answer detailed questions should they arise. If the proposal is approved by the University Senate, it will then be sent to the Board of Trustees for the final level of approval.

This message represents my formal communication with you about this Council action. Please keep a copy for your file(s) on the proposal and I will do the same for the file in the Office of Academic Affairs.

If you have any questions/comments about this action, please contact Professor Mendelsohn (mendelsohn.1@osu.edu) or me.

The proposal was for a name change for the Department - and not for any degree programs. To change the name of any degree program(s), a separate review/approval process would need to be followed.

Congratulations on the successful completion of this important stage in the review/approval process.

Randy

W. Randy Smith
Vice Provost for Academic Programs

Cormier, J. Briggs

From: jlhigle@gmail.com on behalf of Julie Higle [lhigle.1@osu.edu]
Sent: Wednesday, September 03, 2008 1:39 PM
To: Cormier, J. Briggs
Cc: Kay Halasek
Subject: Fwd: FW: Fisher input to IWSE name change
Attachments: Proposal to Change IWSE to ISE.pdf

Kay / Briggs-

Per your request, please find below the concurrence from Fisher COB.

Thanks,
Julie Higle

----- Forwarded message -----

From: Mangum, Stephen <mangum_1@fisher.osu.edu>
Date: Wed, Sep 3, 2008 at 11:44 AM
Subject: FW: Fisher input to IWSE name change
To: "lhigle.1@osu.edu" <lhigle.1@osu.edu>, "jhigle@gmail.com" <jhigle@gmail.com>
Cc: "Forte, Catherine" <forte_13@fisher.osu.edu>, "Zinn, Walter" <zinn_13@fisher.osu.edu>

Dear Professor Higle:

Walter Zinn forwarded your e-mail and the accompanying proposal to me. On the basis of his review as well as my own, please accept this e-mail as a letter of concurrence from the Fisher College of Business. We are supportive of IWSE's proposed name change to the Department of Integrated Systems Engineering.

We appreciate the working relationship established with your department as it pertains to our jointly sponsored MBLE degree.

Sincerely,

Stephen Mangum

Interim Dean

Fisher College of Business

----- Forwarded message -----

From: **Kay Halasek** <halasek.1@osu.edu>

Date: Tue, Sep 2, 2008 at 1:12 PM

Subject: ISWE name change

To: higle.1@osu.edu

Cc: cormier.5@osu.edu

Dear Professor Higle,

In anticipation of placing the IWSE department name change on the Sept. 15 CAA agenda, I have reviewed the materials submitted and have one request for an additional item--a letter of acknowledgement or concurrence from the Fisher College of Business. Becuase ISWE adminsters a joint program with Fisher in Business Logistics and Engineering, such a letter is in order.

This document can be in the form of email correspondence or letter from the appropriate person or unit in Fisher. Please forward the document as soon as possible and before Sept. 15 directly to Briggs Cormier, copying me (halasek.1@osu.edu). Briggs will then distribute the document to Council

If you have any questions, please contact me.

My best,

Kay Halasek
Chair, CAA
Associate Professor of English
Vice Chair, Rhetoric, Composition and Literacy Studies
Ohio State University

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J.L. Higle
Professor and Chair
IWSE, The Ohio State University
210 Baker Systems
1971 Neil Avenue
Columbus, OH 43210

614 292 8100 (Office)
614 292 7852 (FAX)

email: higle.1@osu.edu

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J.L. Higle
Professor and Chair
IWSE, The Ohio State University
210 Baker Systems
1971 Neil Avenue
Columbus, OH 43210

614 292 8100 (Office)
614 292 7852 (FAX)

email: higle.1@osu.edu



College of Engineering

122 Hitchcock Hall
2070 Neil Avenue
Columbus, OH 43210-1278
Phone 614-292-2651
FAX 614-292-9379
E-mail engosu@osu.edu

DATE: 20 June 2008

TO: Randy Smith
Vice Provost, Office of Academic Affairs

FR: Robert J. Gustafson
Associate Dean for Academic Affairs and Student Services

SUBJECT: Departmental Name Change Proposal

Attached is a copy of a proposal from the Department of Industrial, Welding and Systems Engineering to change the name of the Department to Department of Integrated Systems Engineering. This proposal has been carefully considered by the College. The College Committee on Academic Affairs voted 10 for, 0 against and 1 abstention in favor of the proposal on January 14, 2008. The proposal was presented and discussed at a meeting of the College of Engineering Faculty on April 3, 2008. A quorum for a faculty meeting of the College of Engineering (30) was present. The faculty voted 32 for the proposal, 3 against and with 1 abstention.

This proposal is now ready for consideration at the University level. If you have any questions, please feel free to contact either myself or Julia Higle, Chair of the Department involved.

Date: 15 January 2008

To: Robert J. Gustafson
Secretary, College of Engineering

From: George Valco
Chair, College Committee on Academic Affairs

Subject: College Vote on Academic Unit Name Change

XC: Julia Higle
Chair; Industrial, Welding and Systems Engineering



COMMUNICATION
Department of
Electrical & Computer
Engineering

On 14 January 2008 the College Committee on Academic Affairs (CCAA) voted to approve by a vote of 10 approved, 0 opposed, and 1 abstention a motion that the request from the Department of Industrial, Welding and Systems Engineering (IWSE) to change their department name to the Department of Integrated Systems Engineering be approved. Further, CCAA unanimously approved a motion that the request be sent to the college faculty for a vote at the next faculty meeting and that if a quorum was not present that the proposal be sent to the faculty for a vote in a manner approved by the faculty rules. Attached is a copy of IWSE's request. Would you please put this item on the agenda at the next faculty meeting and arrange for a vote by the faculty on this request?

If you have any questions on CCAA's actions please contact me at Valco.1@osu.edu or 292-5110.

Proposal to Rename:
**“Department of Industrial, Welding and Systems
Engineering”**
to
“Department of Integrated Systems Engineering”

October 22, 2007

Revised: December 5, 2007

Executive Summary

The Department of Industrial, Welding and Systems Engineering requests that the name be changed to The Department of Integrated Systems Engineering. The department has administered two disparate programs, “Industrial and Systems Engineering” and “Welding Engineering” since the merging of their respective departments in 1994. The current name of the department suggests that our primary focus is on industrial welding systems. Our programs are broadly interdisciplinary from a traditional engineering perspective, and the persistent sense of the faculty is that the current name has been detrimental to the department since its adoption. By selecting Integrated Systems Engineering we draw attention to the breadth of these programs, without focusing on either “Industrial” or “Welding”.

No changes are requested for the degree programs administered by the department, “Industrial and Systems Engineering” and “Welding Engineering”.

Background

IWSE came to be known as the Department of Industrial, Welding and Systems Engineering following the merger of the Department of Industrial and Systems Engineering and the Department of Welding Engineering in 1994. At that time, the name “Industrial, Welding and Systems Engineering” was adopted as a compromise between the two department names. The two units that were merged in 1994 were both born within the department of “Industrial Engineering”, which began in 1925. As these two disciplines diverged, “Welding Engineering” split from the IE department and became the WE Department in 1948.

The department administers two distinct sets of degree programs:

- Industrial and Systems Engineering (ISE: BS, MS, PhD)
- Welding Engineering (WE: BS, MS, PhD)

These degree programs are essentially disjoint, and courses are offered under separate “Academic Department” codes (IND ENG and WELD ENG). There are no WE courses

in the ISE core, and very limited excursion of ISE students into WE courses as electives. There are two ISE courses in the WE core: ISE 311 (Manufacturing Engineering) and ISE 406 (Industrial Quality Control), both of which are service courses that attract students from a variety of disciplines. There is very limited excursion of WE students into ISE courses as electives. Summary statistics for the two programs can be found in Appendix A of this proposal.

In addition to the ISE and WE programs, the department co-administers a third degree program in collaboration with the Fisher College of Business,

- Business Logistics and Engineering (MBLE)

Among the department's offerings, the MBLE draws exclusively upon the Industrial and Systems Engineering courses.

Our Industrial and Systems Engineering program is one of the "venerable" Industrial Engineering programs. It was among the first to confer degrees in "Industrial Engineering" in the early 1900's, and was among the first such programs to be accredited by ABET in 1936. US News and World Report currently ranks the Industrial and Systems Engineering program as a Top-20 program (from approximately 120 peer programs). Welding Engineering is the only such program and is not ranked by USNWR, due to an absence of peer programs. Lists of peer programs are included in Appendix B of this proposal.

Rationale for the name change

The proposed name change is of strategic importance to the department. Among academic peers, the reputation of the department is derived from the program for which there is a peer group, the Industrial and Systems Engineering program. Peer perception that the department's focus has shifted toward "Industrial Welding Systems" has been a persistent problem for several years (evidence of this can be found in the communications included in Appendix C). It is not an accurate reflection of either program, and is especially problematic for the ISE program. Industrial and Systems Engineering programs typically exhibit academic strength in a breadth of areas including supply chains, logistics, transportation systems, financial systems, service systems, bio-dynamics, etc. They are often closely related to programs in business, computer science, medicine, psychology, and statistics, as well as manufacturing. Additionally, strategic planning within the department has clarified the need for the integration of knowledge from a variety of disciplines in meeting the technical needs of the emerging world. This role is often played by Industrial and Systems Engineers and Welding Engineers, albeit in decidedly different ways.

Through its various incarnations, the department has been known for contributions to Systems Engineering for several decades. This began with the Systems Research Group that developed in the 1950's. The Department of Industrial Engineering broadened its perspective to formally embrace "Systems Engineering" in 1973, when it simultaneously changed the degree and department names to "Industrial and Systems Engineering". It was a bold move – one that explicitly anticipated the manner in which that discipline would move. The department has once again taken a bold move by explicitly

recognizing the prominence of integrative activities and concepts in our disparate disciplines.

The merging of the Departments of Industrial and Systems Engineering and Welding Engineering was not without acrimony, and led to an extended period of contention. The clear sense of the IWSE faculty is that the current name is detrimental to the department and must be changed. Pros and cons regarding a variety of potential names were discussed. The sense of the faculty is that the name of the department should encompass the breadth of our offerings, be forward looking, and anticipate our future rather than resurrect our past. Our **purpose** in selecting “Integrated Systems Engineering” is to balance the needs of the two programs by adopting a name that creates an umbrella for the two disparate programs without focusing on either “Industrial” or “Welding”. This umbrella must be sufficiently broad to encompass the academic backgrounds of the faculty in the department, which include the following incredible spectrum of disciplines:

- Aerospace Engineering
- Bioengineering
- Biomechanics
- Chemical Engineering
- Electrical Engineering
- Engineering Physics
- Industrial Engineering
- Materials Engineering
- Mechanical Engineering
- Metallurgical Engineering
- Operations Engineering
- Operations Research
- Psychology
- Systems Engineering

This composition is unlike that of any other department in the college (and perhaps in the world), and the excellence of our programs depends critically on the ability to integrate concepts and techniques from across the spectrum of engineering disciplines and beyond. “Industrial and Systems Engineering” and “Welding Engineering” have very little in common educationally. The only persistent and substantive theme that is common to both programs is one that is woven throughout them. It is their “interdisciplinary” natures and the extent to which an integration of various disciplines is essential to their successful practice. The **value** of this proposed name change is in our ability to put this integration front and center in a name that broadcasts our breadth.

Previous Actions by the IWSE Faculty

This is not the first time that the IWSE Department has contemplated changing its name. In April 2002, the department considered changing the name to the “*Department of Industrial Engineering*”. Documents associated with that effort summarize the need as follows: “A consistent theme in the discussions of the committee and the discussions during the strategic planning process is that the legacy name of the department serves no one’s interest and confuses outsiders (at best). The question is not whether to change but what change in name to adopt.”

The vote of the faculty at that time was 14 in favor, 10 opposed, and one abstention. This simple majority in favor of the change was not considered to be sufficiently strong support for the name “Industrial Engineering”, and the matter was suspended.

Current Action by the IWSE Faculty

Strategic planning activities within the department led the faculty to re-examine the issues surrounding the name of the department. While the faculty agree that the current name is problematic, it is clear that a “perfect name” probably does not exist. In June 2006, following extensive discussion a secret ballot vote of the faculty was 18 in favor of changing the name to the “*Department of Integrated Systems Engineering*”, 9 opposed, and no abstentions. This super majority was considered to be sufficiently strong support for the new name. The primary reservation voiced in discussions involved a reluctance to eliminate the term “Industrial” or “Welding” from the department name. As a general rule, faculty who were concerned about this focused only on “their” term.

Comparative Data from Institutions with Similar Programs

Earlier in this document, we have alluded to the ISE and WE peer programs. These are described in Appendix B of this proposal.

Specific Actions and Corollary Issues

- Accreditation: ABET accreditation is based on program content as well as the processes and procedures used to undertake curriculum revision. Because the department name does not impact these items, accreditation will not be affected.
- Rankings: Rankings are based on degree programs, and the manner in which they are perceived by academic peers. Changing the department name will not have a detrimental impact on our ability to be ranked. Based on input from peers, it will eliminate some of the confusion regarding the nature of the programs being offered, which can result in a positive impact.
- Undergraduate Major Names, Graduate Programs, Degree Titles, etc: The department currently offers courses under the IND and WELD designations in the Course Offering Bulletin. In a separate request, the IND courses are being reorganized. That proposal is independent of this proposal, and will move forward as such. We do not wish to change the name of any of our undergraduate or graduate programs.
- Prospective Students: Because neither degree program is represented in the department name, there is concern that prospective students may find it difficult to discover our academic programs. This concern emanates primarily from WE constituent groups. In June 2007, all WE undergraduates were polled regarding “how they found us”. While the answers were enlightening, none of the students indicated that the department name was a factor (i.e., most indicated that undergraduate advisors and activities associated with the freshman engineering courses were their routes to the department).
- Overlap in Scope with Other Units: This department has always embraced “Systems Engineering”, and it has been a part of our name for many years. There is no other department within the college that identifies itself as “systems engineering”. There is no degree program within the college that incorporates “systems engineering” within its name, other than “Industrial and Systems

Engineering”. While many activities performed within individual departments involve systems, those systems tend to be domain specific (software systems, transportation systems, etc). Systems engineers study a system as an entity, typically adopting a big-picture view of the system life cycle. It is a discipline that requires the integration of various engineering disciplines, and careful analysis from a business perspective.

Notification and Feedback Efforts

Given that the new name does not specifically include any of the department’s degree programs and the vote was not unanimous, the chair decided to delay the formal request for the name change to provide time for notification and feedback from constituents.

Several mechanisms were undertaken in an effort to solicit feedback. The sense of the ISE faculty was mixed, with most faculty expressing support for the new name, while a few opposed it. The sense of the WE faculty was mixed, with some faculty expressing support for the new name while most opposed it. For that reason, special efforts were directed at the WE community. Responses from several WE alumni were received, almost all of them during the summer and autumn of 2006. A few of them recognized that “Industrial Welding Systems” might be problematic and a few were adamant that welding must remain in the department name. The majority objected to what was perceived as the elimination of the degree program¹, as did a small number of ISE alumni. We have worked to correct this misperception. The response from an Industrial and Systems Engineering Alumni Advisory Committee was overwhelmingly positive².

In December 2006, we engaged the efforts of a Welding Engineering Transition Planning Committee to assist with the development of the plan for the future of the WE program. This committee was comprised of prominent members of the Welding Engineering community. The chair of that committee, Karl Graff (a former chair of the Welding Engineering Department), asked that the formal request to change the name of the current department be delayed until the committee completed its charge. This occurred in July 2007. Somewhat surprisingly, the committee report specifically suggests that the WE program consider changing its name to “Materials Joining”, which it considers to be “more inclusive” than Welding Engineering. This is not under discussion by the Welding Engineering faculty, although it is indicative of the limitations imposed by the current name. Additionally, the committee report suggests that the Welding Engineering program may be experiencing a “visibility” problem, which could be compounded by a change in the department name. They suggested a change in the administrative structure of the program leading to the formal creation of a “Welding Engineering Section” within the department. This will require discussion and a vote from of the department faculty. As of now, the Welding faculty has not initiated this discussion. Upon approval of this proposal, the department faculty will address this suggestion if they have not done so by then. We have also initiated a review of our recruiting methods to determine whether we

¹ Illustrative examples of these correspondences can be found in Appendix C.

² A correspondence from members of this committee can be found in Appendix C.

might enhance visibility of the program through alternative methods involving external constituent groups such as EWI.

In SP 07, the IWSE department chair met with a large group of the Welding Engineering students, virtually the entire group of undergraduate students. Two members of the welding faculty had recently retired, and the purpose of the meeting was to assure the students that plans for the continuity of the program were under way. Preliminary findings of the Welding Engineering Transition Planning Committee were discussed, as was the pending change in the department name. Similar to the alumni, the primary concern was that this might mean that the degree program is being eliminated. They were assured that this is not the case.

In AU 07, the IWSE department chair met with a group of the Industrial and Systems Engineering students to introduce them to the pending change, and to obtain their reaction to changing the name of the department to “Integrated Systems Engineering”. They understood very clearly that the degree program would remain “Industrial and Systems Engineering”, and were overwhelmingly supportive of the new department name. They indicated that they have experienced considerable difficulty explaining that they are not studying “industrial welding systems”, and were very pleased to hear that the department is acting in a way that relieves them of this obligation so that they explain what they “do” instead of what they “don’t do”.

Appendices

A: Program Data

B: Peer Programs

C: Communications

- 1) Letters from: B. Bidanda, C. Klein, R. Radwin, members of the ISE academic peer group. Bidanda and Klein are chairs of the Council of Industrial Engineering Academic Department Heads (past and current, respectively).
These letters illustrate the extent of the detrimental impact of the current name, the manner in which the current name misrepresents the ISE program, and are strongly supportive.
- 2) Letter from F. Saenger, a WE alum.
- 3) Email from Jeffrey Noruk, Richard LaFave, and James Bradley WE alumni.
- 4) Letter from ISE alumni and advisory committee members.

Appendix A

Program Data

	Industrial & Systems Engineering			Welding Engineering		
	Total	ISE	MBLE	Total	On-Campus	Distance
Faculty	17.67			7		
Undergraduate ¹						
Majors	144	144		66		
Pre-Majors	105	105		38		
Graduate ²						
MS	86	50	36	33	13	20
PhD	68	68		12	7	5
Research Expenditures ³	\$851,773			\$225,222		

This is a snapshot of current program data. Faculty with partial appointments are weighted accordingly.

¹ AU07 Enrollments

² AU07 Enrollments

³ FY0607, Expenditures (excludes F&A)

Appendix B

Peer Programs

Peer Programs: Industrial and Systems Engineering

The ISE program is accredited by ABET using the Industrial Engineering program criteria. There are approximately 120 program accredited with these criteria. The Industrial and Systems Engineering Programs are ranked by USNWR under the specialties “Industrial or Manufacturing Engineering”. Rather than present the entire list of programs accredited by ABET using the Industrial Engineering program criteria, we illustrate the peer group for ISE based on the USNWR rankings. In the following lists of ranked programs, none are accredited as Manufacturing Engineering Programs.

US News & World Report Rankings, 2008

Undergraduate engineering Programs

Rank	University	Unit Name
1	Georgia Institute of Technology	Industrial and Systems Engineering
2	University of Michigan–Ann Arbor	Industrial and Operations Engineering
3	Purdue Univ.–West Lafayette (IN)	Industrial Engineering
4	Pennsylvania State U.–University Park	Industrial and Manufacturing Engineering
5	University of California–Berkeley	Industrial Engineering and Operations Research
6	Stanford University (CA)	Management Science and Engineering
7	Northwestern University (IL)	Industrial Engineering and Management Science
8	Texas A&M Univ.–College Station	Industrial Engineering
9	Virginia Tech	Industrial and Systems Engineering
10	Univ. of Wisconsin–Madison	Industrial and Systems Engineering
11	Cornell University (NY)	Operations Research and Industrial Engineering
12	Massachusetts Inst. of Technology	Mechanical Engineering
12	U. of Illinois–Urbana-Champaign	Industrial and Enterprise Systems Engineering
14	Ohio State University–Columbus	Industrial, Welding, and Systems Engineering
14	Univ. of Southern California	Industrial and Systems Engineering
16	University of Florida	Industrial and Systems Engineering
16	University of Pittsburgh	Industrial Engineering
18	Columbia University (NY)	Industrial Engineering and Operations Research
18	North Carolina State U.–Raleigh	Industrial and Systems Engineering

Graduate Programs

Rank	University	Unit Name
1.	Georgia Institute of Technology	Industrial and Systems Engineering
2.	University of Michigan–Ann Arbor	Industrial and Operations Engineering
3	Pennsylvania State U.–University Park	Industrial and Manufacturing Engineering
3	University of California–Berkeley	Industrial Engineering and Operations Research
5	Stanford University	Management Science and Engineering
6	Northwestern University	Industrial Engineering and Management Science
6	Purdue University–West Lafayette	Industrial Engineering
8	Cornell University	Operations Research and Industrial Engineering
8	Texas A&M Univ.–College Station	Industrial Engineering
8	Virginia Tech	Industrial and Systems Engineering
11	University of Wisconsin–Madison	Industrial and Systems Engineering
12	Columbia University	Industrial Engineering and Operations Research
13	University of Southern California	Industrial and Systems Engineering
14	North Carolina State University	Industrial and Systems Engineering
15	Lehigh University	Industrial and Systems Engineering
15	University of Florida	Industrial and Systems Engineering
17	Rensselaer Polytechnic Institute	Decision Science and Engineering Systems ¹
17	University of Texas–Austin	Mechanical Engineering ²
19	Arizona State University	Industrial Engineering
19	Ohio State University	Industrial, Welding and Systems Engineering
19	University of Pittsburgh	Industrial Engineering

Peer Programs: Welding Engineering

USNWR Rankings of Welding Engineering programs are not undertaken. ABET does not offer accreditation in Welding Engineering beyond the level of “general engineering” (i.e., there are no program criteria that are specific to welding engineering). Princeton Review lists over 300 programs for “Welding Engineering” (www.princetonreview.com/college/research/majors). These programs are primarily offered through community colleges, technical institutes, etc. They do not constitute an appropriate peer group for the Welding Engineering program at The Ohio State University.

¹ Industrial and Management Engineering Program

² Graduate Program in Operations Research and Industrial Engineering

Appendix C

Communications

E3437 Thomas and Nell Lafferre Hall
Columbia, MO 65211
Phone: (573) 882-2692 FAX :(573) 882-2693
e-mail: kleinc@missouri.edu

June 8, 2007

Julia L. Higle, Chair
Department of Industrial, Welding and Systems Engineering
210 Baker Systems Engineering
1970 Neil Ave.
Columbus, OH 43201

Dear Julie,

Thank you for giving me the opportunity to comment on your proposed name change. Several years ago I was a candidate for the chair's position and had the opportunity to visit campus, talk to faculty and to review the program. At that time I found the name of the department to be unclear as to the content and make up of the program and not beneficial to those in the department. After reading the material you sent regarding the potential change in the name of your department from "Industrial Welding and Systems Engineering" to "Integrated Systems Engineering" I see that many of the same issues, as well as others, still exist and definitely need to be addressed for the department to move forward and increase its national visibility and ranking. The rationale behind the new name and your assessment of the need for change is solid and well thought out.

I remember when the department was first changed to the current name, "Industrial, Welding and Systems Engineering". At that time the community as a whole did not understand the name or how the merger would work. Since then the name has remained confusing to the IE community at large and makes it difficult to determine what the core strengths of the department are. Based on my own assessment of your department the name does not reflect the depth and capabilities of all of your faculty members and does not serve well those within the welding program.

As chair of the Council of Industrial Engineering Academic Heads, I believe the name change will be well received and better reflects the overall direction of industrial engineering programs around the country. Industrial Engineers have always led the way in terms of integration and systems thinking. The consideration of "the design, improvement, and installation of integrated systems of people, material, equipment, and energy" is the primary representation of the discipline. Your new name taps into this nicely, without placing your welding program under an "Industrial Engineering" banner.

It is important to note that although the department name is changing, the names of the degree programs are not. Therefore, the program criteria used in accrediting the Industrial Engineering degree will not be affected. Specifically, your "Industrial and Systems Engineering" program will continue to be accredited based on the criteria set by The Institute of Industrial Engineers,

IIE. Likewise, the criteria used in any accreditation of the Welding Engineering degree will remain the same. Lastly, note that your peer groups for ranking purposes will also remain the same.

I wish you the best as you work through this process. Having been through a name change for our department about seven years ago, I know that the most difficult step is the determination of the name and the buy in from constituents. You have already taken this first, and undoubtedly the most difficult step.

Best regards,

A handwritten signature in blue ink, appearing to read "Cerry M. Klein". The signature is fluid and cursive, with a long horizontal stroke at the end.

Cerry M. Klein
Professor and Chair



University of Pittsburgh

Department of Industrial Engineering

May 31st, 2007

1048 Benedum Hall
Pittsburgh, PA 15261
412-624-9830
Fax: 412-624-9831

Julia L. Higle, Professor and Chair
Industrial, Welding and Systems Engineering Department
210 Baker Systems Engineering,
1971 Neil Ave, Columbus, OH 43210

Dear Julie,

I have carefully reviewed the material that you sent regarding the proposal to change your department name from "Industrial, Welding and Systems Engineering" to "Integrated Systems Engineering". I wholly support this change as being long overdue, and recognize that this is an important step in moving the department forward.

As the past Chair of the Council of Industrial Engineering Academic Department Heads (CIEADH) and as an ABET evaluator for over a decade, I am well aware of Ohio State's pivotal role in the development of the field of Industrial Engineering. My understanding is that most Welding programs are *technology* programs offered through Engineering Technology Schools, Community Colleges and Vocational Schools. As a result, when the department adopted the current name, it was viewed quite negatively as a shift in the academic emphasis from Industrial Engineering to *Welding Systems*. This, and the subsequent decline in the visibility of the program, caused considerable dismay among the IE academic peer group. I am quite hopeful that under the department's new leadership, Industrial Engineering is no longer being targeted for this transition.

I was surprised to learn from the material that you provided that the department nearly changed the name to **Industrial Engineering** a few years ago. That name would have served the ISE program extremely well. However, the name that you have selected, **Integrated Systems Engineering** is clever in that it serves the ISE program equally well! The IE community is familiar with *integrated systems*, as we have always been concerned with "the design, improvement, and installation of integrated systems of people, material, equipment, and energy."

It is important for our profession that Ohio State has a strong Industrial Engineering program. I hope that you are successful in this endeavor. If I can provide any further information, or help in any way, please do not hesitate to ask.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Bidanda".

Bopaya Bidanda
Ernest Roth Professor & Chair



June 7, 2007

Professor Julie Higle, Chair
Department of Industrial & Systems Engineering and Welding Engineering
The Ohio State University
1971 Neil Avenue
Columbus, Ohio 43210

Re: Letter in Support of Department Name Change

Dear Julie,

I am writing to enthusiastically support the proposed name change from “Industrial & Systems Engineering and Welding Engineering” to the “Department of Integrated Systems Engineering.” The proposed name change does not only solve the problem of an awkward, and often confusing name, but it much better reflects the educational and research activities that your faculty members are currently engaged in, follows national trends, and leads the evolution of the field of industrial engineering.

The industrial engineering department at the University of Wisconsin, where I am a full professor, recently changed its name from “Industrial Engineering” to “Industrial and Systems Engineering.” We felt that simply the name “industrial engineering” calls to mind factories and smokestacks, and early 20th Century images of industrial engineering in days gone by. “Industrial & Systems Engineering and Welding Engineering” elicits similar images.

The field in the 21st Century is much more than industry driven and deals with the complex interrelationships within a system comprised of people, equipment, materials, information and energy, and examines ways to better design, implement, improve and manage the performance of these integrated systems. The name change to the Department of Integrated Systems Engineering will help indicate to the public as well as perspective students what the field is about and where it is going. I urge the University to Support your efforts to advance the name change.

Sincerely,

Robert G. Radwin, PhD.
Professor, Department of Industrial & Systems Engineering
Professor and Chair, Department of Biomedical Engineering

AUG 23 2006

Fritz Saenger, Jr. PE, IWE
Consulting
Materials Joining
Marketing

August 22, 2006

Dr. W. A. Baeslack
Dean, College of Engineering
The Ohio State University
Columbus, Oh 43210

Subject: Renaming of the Industrial, Welding, and Systems Engineering Department

Dear Bud:

I learned a couple of weeks ago of the plan to change the name of IWSE to "Integrated Systems Engineering." I want to express my strong reservations about this specific proposal – and explain why I feel it's not a good direction to take.

I admit I've never cared much for the current name. It's cumbersome and hard to remember, but it at least gives some indication of the disciplines are part of the program. The proposed new name, however, is worse, because it provides no indication to people outside the department or the college of what it's about!

I think that the department name should reflect as much as possible the type of curricula that reside there. Of course, with enough marketing and publicity effort, any name can be "sold," but I doubt that such an effort can or would be mounted. Let's be honest with ourselves; we are dealing with *manufacturing engineering* here. That's nothing to be ashamed of! I spent my entire career in that area and I'm proud of it. Further, the disciplines taught in the department are critical to making essential improvements in the US manufacturing base.

As welding engineers, we are regularly challenged to explain what we do, so I know something about living in a world people know little about. But when I explain that welding is a key segment of the broad field of *manufacturing engineering*, and that it is involved in more than half of US manufacturing, I can begin to communicate.

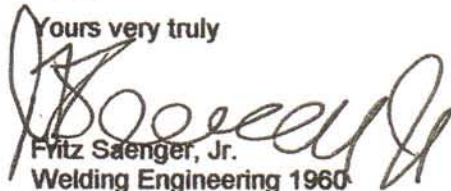
I believe that if IWSE wants to be attractive to prospective students, its name must reflect at least something of what it does. Accordingly, I suggest consideration (or reconsideration) of names such as:

Manufacturing Systems Engineering (MSE is a nice set of initials!)
Industrial Systems Engineering
Process and Systems Engineering
Manufacturing Process and Systems Engineering.

I'd like to see "welding" in the title, but I'm willing to accept its omission if the title is more descriptive of the family of disciplines taught there. We must all remember that the name must not be attractive only to faculty; *it must be most informative to prospective students.*

I hope these thoughts will be taken into consideration as this topic is discussed and a final decision is made.

Yours very truly


Fritz Saenger, Jr.
Welding Engineering 1960

CC: ✓ Dr. John Lippold
✓ Dr. Julia Higle

60819 Baeslack re IWSE

1121 Ravine Ridge Drive
Columbus, OH 43085
Phone/Fax 614-431-3576
fsaenger@columbus.rr.com

23 of 28

Subject: RE: Welding Engineering Dept Name

From: Jeffrey <jnoruk@wi.rr.com>

Date: Fri, 25 Aug 2006 17:14:28 -0500

To: "Julia L. Higle" <higle.1@osu.edu>

Julia,

Thanks very much for your prompt reply. I look forward to meeting you and discussing this further. Have a nice weekend.

Regards,

Jeff Noruk

-----Original Message-----

From: Julia L. Higle [mailto:higle.1@osu.edu]

Sent: Friday, August 25, 2006 4:14 PM

To: Jeffrey

Subject: Re: Welding Engineering Dept Name

Jeff-

I absolutely agree that we need to give extra thought to the manner in which we advertise the program, given the change in the department name. This actually applies to both programs, since neither "welding" nor "industrial" will appear in the department name. We'll work with the college to ensure that the programs are visible, and perhaps more importantly, "searchable."

As for the inches and miles, there is absolutely no intent to eliminate the "welding engineering" degrees. I'm committed to both of the programs in the department. We're changing the name of the administrative unit, and that's all.

I hope you'll feel free to contact me if you have any other questions or concerns.

Thanks,
Julie Higle

J.L. Higle
Professor and Chair
Industrial, Welding, and Systems Engineering
210 Baker Systems
1971 Neil Avenue
Columbus, OH 43210

(614) 292-8100
email: higle.1@osu.edu

----- Original Message -----

From: Jeffrey <jnoruk@wi.rr.com>
Date: Friday, August 25, 2006 4:20 pm
Subject: Welding Engineering Dept Name

Julie,

I really appreciate your decision to talk to all of us Welding Engineering graduates directly through the alumni email directory. It does help to hear that the degree will still have the words Welding Engineering on it. However, the old saying "Out of sight, out of

mind"still applies in this 30 second sound bite world we live in. Without having the name of the department representing in any way the Welding Engineering part of its mission, I'm afraid the prestige and awareness associated with this program and The Ohio State University will be lost. Do you have any plans to increase the visibility of the department to help counter the loss that will occur with the name change? For example, Google web searches on welding engineering will now be less likely to show The Ohio State University. My other concern is whether this is a case of "giving an inch and taking a mile", with the mile being the eventual change to not having Welding Engineering in the degree name at all.

Thanks for reading this and I'd appreciate any feedback you can give me.

Sincerely,

Jeff Noruk

President

Servo Robot

Milwaukee, WI

WE ' 78

Subject: Integration of Disciplines or "Branches" of Engng

From: richard_lafave@verizon.net

Date: Thu, 07 Sep 2006 08:29:10 -0500 (CDT)

To: higle.1@osu.edu

Dear Professor:

I read your explanation as to why the proposed department name change makes sense. This has been pointed out before. This characteristic of integration was published in the Welding Engineering newsletter in October, 1988 before the old department was dissolved was added to Industrial and Systems Engineering.

The job title Welding Engineer is a recognized title in the US Federal listings of job titles. The Welding branch of Engineering is recognized by NCEES and NSPE both. There has been a Principles and Practices Exam for registration of Welding Engineers by this title for many years. This title can be used by those who are duly licensed in the state in which they practice Engineering. This law is currently up for revision here in the Commonwealth of PA.

<http://www.legis.state.pa.us/WU01/LI/BI/BT/2005/0/SB0655P1911.HTM>

However, in PA the conferring of a diploma by a college or university is still not enough to permit the use of the title "Engineer". One has to have the PE license from the Commonwealth by exam or comity. I think it is different in Ohio now with the Revised Code there but "when in Rome, do as the Romans do".

Bud Baeslak knows all of this having been fairly active in the NSPE as the Educational Representative for the NE Region while he was at RPI.

Best regards,

Richard A. LaFave, P.E., IWE
BWE 68
Monroeville, PA

Subject: Name Change

From: James Bradley <bradjwmjh@msn.com>

Date: Thu, 24 Aug 2006 14:34:51 -0400

To: higle.1@osu.edu

Welcome to OSU! What a sad commentary that you will be wasting your time on name change rather than developing plans for the future.

There was a song long ago "The Times They Are A Changing". I guess we WELDING ENGINEERS who graduated with degrees in Welding Engineering should just accept it.

However, look at the many things that society has not accepted when change was proposed. Our inner cities were going to be destroyed of their old buildings but now urban renewal has saved many of these beautiful structures and the past is blending with the future.

There have been many battles fought in the past about the welding engineering department - Starting it in the first place; adding the Ph.D. program; association with the Edison Welding Institute and others.

As a graduate I was always proud to say I received a degree in Welding Engineering from the only university granting such a degree and not some minor associated with another major.

It is not clear to me if students in the new named department will get a degree in welding engineering. If they will then maybe the name is irrelevant. If not then I really oppose the name. The name also supports the idea that basic manufacturing is not important in the USA anymore and unfortunately this is true, but without curriculums supporting basic manufacturing it will continue to decline.

If this is just the beginning of the end of welding engineering at Ohio State then just kill it rather than allowing it to suffer a slow death.

Hopefully you will change your decision.

James W. Bradley
B.WE 1962 M.Sc. 1963
bradjwmjh@msn.com

October 10, 2007

Dr. Julia L. Higle
Chair, Industrial, Welding and Systems Engineering Department
The Ohio State University
Columbus, OH 43210

Dear Julie,

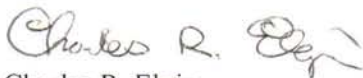
As members of the Industrial and Systems Engineering Advisory Committee and as alumni of the Industrial and Systems Engineering program, we are pleased to be able to offer our support for your proposal to change the name of the department to "Integrated Systems Engineering".

Industrial and Systems Engineering graduates create career paths in a variety of domains, spanning both the manufacturing and service sectors of the economy. It is not unusual to find industrial engineers in key positions, applying their engineering skills to business processes and service systems just as readily as they apply them to manufacturing processes. An industrial engineering education is necessarily broad and integrative in order to ensure that students are prepared for the challenges that such career paths will entail.

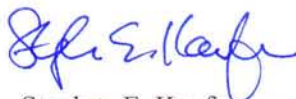
The current name of the department, Industrial, Welding and Systems Engineering, creates a sense of programs that are primarily focused on the manufacturing enterprise. By placing the Industrial and Systems Engineering program under the administrative umbrella renamed as "Integrated Systems Engineering", students will have a much clearer sense of the breadth of opportunities available to them. This is a very positive step, and consistent with the curriculum revisions that we have been asked to review.

The proposed name change is of strategic importance to the department. Integrated systems are rapidly becoming the standard within industry both from an individual company perspective and across the global markets within which these companies compete. Having the department named "Integrated Systems Engineering" captures the essence of what engineers are expected to deliver in industry regardless of their specific specialty. As The Ohio State University prepares graduates to compete in the global market, having the name of the department aligned with what is expected of its graduates is critical.

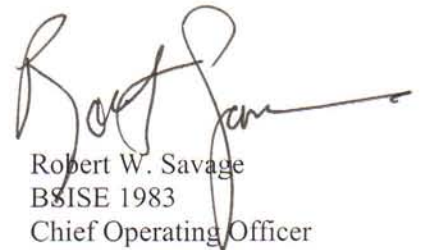
Sincerely,



Charles R. Elgin
BSISE 1978
Senior Manager
BearingPoint



Stephen E. Kaufmann
BSISE 1981
Chief Financial Officer
Lattice Communications



Robert W. Savage
BSISE 1983
Chief Operating Officer
Taco Bell Corp.