INTEROFFICE MEMO

Date: Feb. 1 2017

To: Engineering College Curriculum Committee

Graduate College Council

Graduate college Catalog and Curriculum Committee

From: Say Kee Ong, CCEE DOGE

Subject: Add and delete areas of specialization for Civil Engineering graduate degree major

The Civil, Construction and Environmental Engineering (CCEE) department would like the College of Engineering and the Graduate College to approve the following two items for the graduate degrees of Civil Engineering as per Faculty Handbook Section 10.8.1 and 10.8.2.

Item 1:

On Jan. 26, 2017, graduate faculty members of the CCEE Department met to discuss and vote on a new area of specialization "Intelligent Infrastructure Engineering". The area of specialization was proposed by a group of CCEE graduate faculty members. The vote to include this new area of specialization was unanimous.

Briefly, civil engineering infrastructures have made technological advances in recent years by incorporating intelligent capabilities (sensors, actuators, real time monitoring, programmable logic controllers, smart network controls, etc.) to dynamically monitor and respond to internal and external effects and changes to built infrastructure. There is a need to train future engineers who will be monitoring and assessing the health and efficiency of these infrastructures (bridges, buildings, underground structures) by incorporating capabilities such as sensing systems, optimization systems, and big data analytics. Students conducting research in this area of specialization will be taking civil engineering courses plus other specialized courses such as control theory and big data analytics already available in other departments.

Request: CCEE department requests that the area of specialization "intelligent Infrastructure Engineering (MS, PhD)" be included as an area of specialization for the Civil Engineering graduate degree major.

Item 2:

Currently, CCEE department has "Geometronics" listed as an area of specialization for the Civil Engineering major. The last faculty in charge of this area of specialization retired in 2007and the department has not replaced this faculty member with another faculty in the same area of expertise. Since then, CCEE department did not have any graduate students specializing in this area.

Request: CCEE department requests that the area of specialization "Geometrics" be deleted from the list of areas of specialization for the Civil Engineering graduate degree major.

We would appreciate approval for the above two items. If more information is needed, please contact me. Thanks.

Ong, Say K [CCE E]

From: Castleberry, Paul S [ENGSS]

Sent: Thursday, February 16, 2017 1:07 PM

To: Rehmann, Chris R [CCE E]
Cc: Ong, Say K [CCE E]

Subject: RE: Latest update on ECCC vote

Good Thursday Afternoon Chris......thank you for the reminder.....passes ECCC unanimously (8-0).

Take care, Paul

Paul S. Castleberry Ph.D.

Classification Officer College of Engineering

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"Without consultation, plans are frustrated, but with many counselors they succeed."

Proverbs 15:22

From: Rehmann, Chris R [CCE E]

Sent: Wednesday, February 15, 2017 5:14 PM

To: Castleberry, Paul S [ENGSS] <paulca@iastate.edu>

Cc: Ong, Say K [CCE E] <skong@iastate.edu> **Subject:** RE: Latest update on ECCC vote

Paul,

Where do we stand on the CCEE specializations for the Graduate College? Has everyone voted?

Thanks.

Chris

From: eccc-bounces@iastate.edu [mailto:eccc-bounces@iastate.edu] On Behalf Of Castleberry, Paul S [ENGSS]

Sent: Thursday, February 02, 2017 4:20 PM
To: eccc [ENGSS] < eccc@iastate.edu >
Subject: Latest update on ECCC vote

Importance: High

Good Thursday Afternoon ECCC,

Latest update on ECCC vote.....take care.

Paul