TO:  Stu Zweben  
    Secretary, College of Engineering

FROM:  Ed McCaul  
    Secretary, CCAA

SUBJECT:  Academic Unit Name Change

DATE:  24 February 2011

On the 23rd of February 2011, CCAA voted to approve the request from Civil and Environmental Engineering and Geodetic Science (CEEGS) to change their department name to the Department of Civil, Environmental and Geodetic Engineering by a vote of 11 approved, 0 opposed, and 0 abstentions. Attached is a copy of CEEGS’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.
TO: Professor Gregory Washington  
Interim Dean, College of Engineering

FROM: Carolyn J. Merry  
Professor and Chair, Department of Civil and Environmental Engineering and Geodetic Science

SUBJECT: Name Change for Department

DATE: 8 January 2011

Executive Summary

The Department of Civil and Environmental Engineering and Geodetic Science (CEEGS) requests that the department name be changed to the Department of Civil, Environmental and Geodetic Engineering. The department had administered two distinct programs, “Civil Engineering” and “Geodetic Science,” since the merging of the Department of Civil and Environmental Engineering and the Department of Geodetic Science in 1994. In 2004, ½ of the faculty in the Geodetic Science area transferred to the School of Earth Sciences (SES). The graduate program was jointly administered by the two departments, with rotation of the Graduate Studies Committee Chair every three years. The focus areas of the faculty in SES include geodesy, geodynamics and geophysics in the geodetic science field. Focus areas of the CEG faculty include engineering applications in the geodetic science field, focusing principally on geoinformation and geodetic engineering topics, such as real-time mobile mapping, position, navigation and timing (PNT), multi-sensor integration, and image understanding.

The University PhD program review in 2008 indicated that the Geodetic Science and Surveying program needed to be reassessed and/or restructured. An MOU between the College of Engineering and the Division of Natural and Mathematical Sciences (NaMS), College of Arts and Sciences, was signed in October, 2009. With this MOU, the administration of the Geodetic Science and Surveying graduate program was transferred to NaMS. A specialization track in Geoinformation and Geodetic Engineering was developed for the Civil Engineering graduate program and accepted by the CEEGS department faculty on January 6th, 2010.

No changes are requested for the degree programs administered by the department – “Civil Engineering” and “Environmental Engineering” – and for the two minor degree programs – “Environmental Engineering minor” and “Surveying and Mapping minor.”
The Geomatics Engineering undergraduate program administered by the department is being de-activated with no new students being admitted into the program. ABET accreditation for the program will not be requested beyond 2012. The remaining undergraduate students in the geomatics engineering program should graduate no later than June 2012.

The faculty in CEEGS voted to accept the proposed department name change on January 7, 2011. The vote was positive (14 yes, 0 no, 1 abstain) out of 21 eligible faculty. The School of Earth Sciences has provided a letter of concurrence supporting the department name change.

Background

The Department of Civil and Environmental Engineering and Geodetic Science (CEEGS) had administered two distinct programs, “Civil Engineering” and “Geodetic Science,” since the merging of the Department of Civil and Environmental Engineering and the Department of Geodetic Science in 1994. In 2004, ½ of the faculty in the Geodetic Science area transferred to the School of Earth Sciences (SES). The graduate program codes were separated into 670 (incoming students to the Geodetic Science and Surveying graduate program), 199 (graduate students assigned to CEEGS), and 332 (graduate students assigned to SES). The geodetic science course offerings were also relabeled from GEOSCI courses to GEODSCI E (COE classes) and GEODSCI M (SES classes) courses. The graduate program was jointly administered by the two departments starting in 2004, with rotation of the Graduate Studies Committee Chair every three years.

The focus areas of the faculty in SES include geodesy, geodynamics and geophysics in the geodetic science field. Focus areas of the CEG faculty include engineering applications in the geodetic science field, focusing principally on geoinformation and geodetic engineering topics, such as real-time mobile mapping, position, navigation and timing (PNT), multi-sensor integration, and image understanding.

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Rationale for the name change

During the past ten years, the engineering-related fields of geodetic science, which include mapping, geographic information science (GISc), remote sensing and photogrammetry, have been moving towards geospatial information science and technology. For example, the fields of photogrammetry and remote sensing include the spatial information providers, whereas the mapping and GISc fields are the spatial information managers. Leading national and international professional societies are now using geospatial and geoinformation in their journal titles. For example, ASPRS (American Society for Photogrammetry and Remote Sensing) publishes *Photogrammetric Engineering and Remote Sensing* – the official journal for imaging and geospatial information science and technology, and ISPRS (International Society for Photogrammetry and Remote Sensing) publishes the *ISPRS Journal of Photogrammetry and Remote Sensing* – information from imagery. In addition, a lead government agency in charge of defense mapping and spatial intelligence gathering for the Department of Defense – the National Imagery and Mapping Agency (NIMA) – changed its name to the National Geospatial-Intelligence Agency (NGA), which clearly follows the international trend of the profession. Recently, the U.S. Army Corps of Engineers Topographic Engineering Center (TEC) changed its name to the U.S. Army Geospatial Center.

Geospatial information technology is a branch of Information Technology, dealing with spatio-temporal information ranging from planetary to microscopic scales. Geospatial information technology resonates well with the College of Engineering’s strategic plan. Moreover, geoinformation is one of the three areas that our departmental strategic plan has identified as key focal strengths. Virtually all specialty programs in our department are users of spatial information, such as surface mapping (rendering of the Earth’s surface, construction sites, man-made objects) and their classification (land use/cover, soil properties), and for mapping general 3D objects. The geodetic engineering faculty in the department specialize in extracting useful information from multiple sensors, and in visualizing and managing this information. In working closely with the user community of spatial information in our department and in the college, we can facilitate the process and exploit the synergism of this technology to the benefit of all involved.

There is an increasing demand for students with a background in geospatial information technology at the BS and MS levels. More than 200 companies in the private sector are in one way or another providers of geospatial information products (digital maps, orthophotos, DEMs (digital elevation models), thematic maps, land use/land cover maps, city models, building models, site models, flood risk maps, and damage assessments, to name a few). Also, government agencies and municipalities, as users of geospatial information, need experts at all levels.

The MS/PhD in Geodetic Science had three tracks – mapping/GISc, photogrammetry/remote sensing, and geodesy. Over the past several years, there have been between 50-60 students in the geodetic science program, with 60-70% of these students being in the mapping/GISc and photogrammetry/remote sensing areas. The MS/PhD in the Civil
Engineering graduate program had a remote sensing specialization. As part of the redirection of the program, the mapping/GISe and photogrammetry/remote sensing tracks in the MS/PhD Geodetic Science program will be moved towards a Geoinformation and Geodetic Engineering specialization in civil engineering. This will allow students with a broad range of backgrounds, e.g., strong engineering and science backgrounds, to pursue this degree. The proposed program specialization to geoinformation and geodetic engineering will provide additional course selection for the civil engineering students, contributing to the depth and breadth of other relevant programs in the College of Engineering. Synergistic relationships with environmental engineering, transportation engineering and other fields within the department will further strengthen the multidisciplinary character of education and research.

Faculty vote on the department name change

The faculty in CEEGS voted to accept the proposed name change on January 7, 2011. The vote was positive (14 yes, 0 no, 1 abstain). There are 21 eligible faculty in the department to vote on the name change.

Degree program, titles and course listings

No changes are requested for the degree programs administered by the department — “Civil Engineering” and “Environmental Engineering.” A BS, MS and PhD program are offered in Civil Engineering; a BS program is offered in Environmental Engineering. There are no changes for the two minor degree programs — the “Environmental Engineering minor” and the “Surveying and Mapping minor.”

A specialization track on Geoinformation and Geodetic Engineering was developed for the Civil Engineering graduate program and accepted by the department faculty on January 6th, 2010. New graduate students enrolling January 2010 or later in the College of Engineering follow the Geoinformation and Geodetic Engineering track in the civil engineering graduate program (program code of 105). The students will graduate with a MS or PhD in Civil Engineering from the Graduate School. A letter outlining the new track in the Civil Engineering graduate program was sent to the Graduate School in January, 2010. The geodetic science faculty in the department (Profs. Dorota Grejner-Brzezinska, Rongxing Li, Anton Schenk (emeritus), and Alper Yilmaz) were appointed with a Category P advising status in the Civil Engineering graduate program. These faculty have their primary Category P advising status in civil engineering and will continue their existing Category P advising status in geodetic science.

Of the three program codes (670, 199, 332) currently associated with the geodetic science program, the program code of 199 will only be used for the current Geodetic Science graduate students enrolled in the College of Engineering until they graduate. The program code of 332 is used for current Geodetic Science graduate students. The code 332 will eventually be discontinued. The code 670 will designate the Geodetic
Science and Surveying program in NaMS and all new graduate students enrolling January 2010 or later will be associated with this code. Course change forms were initiated to convert the existing GeodSciM classes to Geodetic Science classes. In addition, course change forms have been submitted to convert the existing GeodSciE (GEODSCI E) classes to Civil Engineering (CE) classes.

Current geodetic science students in the College of Engineering (41 students – program code of 199) were alerted to the graduate program change. They will continue their graduate degree in geodetic science (program code of 199 – GeodSciE) and will graduate with a Geodetic Science degree from the Graduate School, where it is understood that they must fulfill all graduation requirements in the geodetic science program at the time of enrollment. However, the students had the option to petition to transfer to the Civil Engineering program in January 2010, if they desired.

The Geomatics Engineering undergraduate program (program code 202) administered by the department is currently being de-activated. New students are not being admitted into the program. ABET accreditation for the program will not be requested in 2012. The last student should graduate from the geomatics engineering program in June 2012.

As agreed to in the October 2009 MOU, administration of the undergraduate major program in Mapping and Land Information Science was transferred to the School of Earth Sciences. There have not been any undergraduates in this program for many years.

**Letter of concurrence**

A letter of concurrence is attached from the School of Earth Sciences.
From: Berry Lyons <lyons.142@osu.edu>
Sent: Friday, May 28, 2010 2:05 PM
To: merry.1@osu.edu
Cc: Chris Jekeli
Subject: Re: Letter of concurrence

Carolyn:
The School of Earth Sciences has no concerns about this, and therefore we concur with the proposed name change of your Department. Berry

On May 25, 2010, at 10:21 PM, Carolyn J. Merry wrote:

> Berry,
> In our last faculty meeting, the faculty voted positively to change our department name to the Department of Civil, Environmental and Geodetic Engineering. In preparing the paperwork for the academic unit name change, I need letters of concurrence from related units. Could you write me a letter saying that your department concurs with the proposed name change?
> Carolyn
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Attachment 1. Letter of Concurrence from the School of Earth Sciences.