Date: 9 December 2014

To: Randy Smith  
Vice Provost, Office of Academic Affairs (OAA)

From: Ed McCaul  
Secretary, College Committee on Academic Affairs (CCAA)

Subject: Surveying and Mapping Minor

CCAA has reviewed and approved the attached Surveying and Mapping Minor to include a request for an exception to the University's 18 hour credit limit due to professional registration requirements. This minor is being submitted to you as required by the university's new minor policy. If you have any questions concerning this minor please let me know.
Date: November 24, 2014
To: CCAA
Re: Surveying and Mapping Minor

The Department of Civil, Environmental, and Geodetic Engineering currently offers the Surveying and Mapping Minor, which is designed for students interested in pursuing a career in professional land surveying. Completion of the Surveying & Mapping Minor, in combination with the BS-Civil Engineering degree, will enable students to sit for the Fundamentals of Survey exam in the State of Ohio and pursue licensure as a professional surveyor. This minor and its requirements has been reviewed and approved by the State Board of Registration for Professional Engineers and Surveyors.

Given the nature and purpose of the minor, and its oversight by the State Board, the Department of Civil, Environmental, and Geodetic Engineering would like to request that the following exception be granted for the Surveying and Mapping Minor:

1. **The Surveying and Mapping minor shall require nineteen (19) credit hours.** As this minor is reviewed and approved by the State Board, removal of any of the courses listed on the minor would fall short of either the categorical requirements of the State Board, or the minimum sixteen (16) credit hours required by the State Board.

For the reasons stated above, we respectfully request that this exception be made, in order to allow our students to continue to complete this minor, and to sit for the Fundamentals of Survey exam in the State of Ohio and pursue licensure as a professional surveyors. Feel free to contact me if there is any additional information required. Thank you for your time and consideration in this matter.

Sincerely,

[Signature]

Dorota A. Grejner-Brzozinska
Professor and Chair
College of Engineering Department of Civil, Environmental and Geodetic Engineering
Surveying & Mapping Minor (Semester Requirements)

Students interested in pursuing a career in professional land surveying should consider completing the Surveying & Mapping Minor through the Department of Civil, Environmental, and Geodetic Engineering. Completion of the Surveying & Mapping Minor, in combination with the BS-Civil Engineering degree, will enable students to sit for the Fundamentals of Survey exam in the State of Ohio and pursue licensure as a professional surveyor.

The following guidelines are intended to assist students who will begin the Surveying & Mapping minor courses Autumn 2014 or later.

A. Prerequisites for Survey & Mapping Minor *Must be completed prior to beginning the minor program:
CivilEn 2410 Intro to Geomatics Eng

B. Requirements of Minor:
1. Credit hour minimum requirement
   Semester = 19 credit hours
2. Required courses:
   (Semester Course)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Term(s) Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>CivilEn 2090 (1 hr)</td>
<td>Professional Aspects of Civil and Environmental Engineering</td>
<td>AU, SP</td>
</tr>
<tr>
<td>CivilEn 5410 (3 hr)</td>
<td>Engineering Surveying</td>
<td>AU</td>
</tr>
<tr>
<td>CivilEn 5411 (4 hr)</td>
<td>Legal Aspects of Surveying</td>
<td>AU</td>
</tr>
<tr>
<td>CivilEn 5412 (4 hr)</td>
<td>Land Boundary and Development Principles³</td>
<td>SP</td>
</tr>
<tr>
<td>CivilEn 5441 (3 hr)</td>
<td>Intro to GPS: Theory and Application</td>
<td>SP</td>
</tr>
<tr>
<td>CivilEn 5461 (4 hr)</td>
<td>Geospatial Numerical Analysis</td>
<td>AU</td>
</tr>
</tbody>
</table>

Survey & Mapping Minor Recommended Sequence of Classes

AUTUMN SEMESTER                  SPRING SEMESTER
CivilEn 2410                    CivilEn 2090

AUTUMN SEMESTER                  SPRING SEMESTER
CivilEn 5410                    CivilEn 5412
CivilEn 5411

AUTUMN SEMESTER                  SPRING SEMESTER
CivilEn 5461                    CivilEn 5441

NOTES:
1. CivilEn 2410 must be completed prior to beginning the minor program.
2. Civil Engineering students may count CivilEn 5410 (3 hr) and CivilEn 5441(3hr) toward BOTH the Surveying and Mapping Minor and Civil Engineering Technical Electives.
3. CivilEn 5412 has a prerequisite of CivilEn 5411.
Surveying and Mapping Minor Form

Undergraduate Minor Program Policy
COLLEGE OF ENGINEERING
Approved by CCAA on 10 November 1999
Revised for semester calendar 10 March 2010
Revised 31 May 2012
Revised 15 November 2012
Revised 14 April 2014

MINOR PROGRAMS AT THE OHIO STATE UNIVERSITY

An undergraduate minor consists of a coherent curricular program designed to allow students to pursue academic interests that go beyond their major. Students pursue minors to complement their major’s area of specialization, to better define themselves academically and to employers, to gain credit for classes previously taken that do not count towards a major degree, or merely to pursue other interests. In addition, some academic units require their students to obtain a minor. Students may take any minor in any college provided that they follow the curricular guidelines set by the college or unit that administers the minor.

ACTIONS REQUIRED OF STUDENTS

Minors pursued by students with Majors in the College of Engineering are administered as follows:

1. Approval of many minors is managed entirely through the Degree Audit Reporting System (DARS)
2. Minor Program Forms will only be required if a student’s DARS does not certify the courses for the minor as prescribed by the college or unit that administers the minor
   a. Minor Program Forms must be signed by an advisor in the college or unit that administers the minor and by the student’s advisor in their Major Program prior to the student being accepted into the Minor program. Copies of this form will be retained by the college or unit that administers the minor and the Major Program.
   b. Students typically file Minor Program Forms with the College of Engineering when they file applications to graduate. Students are advised to check with the college or unit that administers the minor in advance of the deadline for filing applications to graduate
   c. To change a Minor after submitting a Minor Program Form, a student must re-file a new Minor Program Form with all the appropriate signatures.

RULES GOVERNING THE SURVEYING AND MAPPING MINOR

The following rules, per the College of Engineering Minor Policy, apply specifically to this minor:

- Minimum C- for a course to be listed on the minor
- Minimum 2.00 cumulative point-hour ratio required in the minor course work
- Course work graded Pass/Non-Pass cannot count on the minor
- No more than 3 credit hours of course work graded Satisfactory/Unsatisfactory may count toward the minor
THE COLLEGE OF ENGINEERING
Undergraduate Minor Program Form (to be filed as soon as you begin taking minor classes)

Student Name: ________________________________________________________________
Major: _________________________________________________________________________
E-Mail Address: ________________________________________________________________
Name of Undergraduate Minor: Surveying and Mapping Minor

Surveying and Mapping Undergraduate Minor Program of Study

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Title</th>
<th>Credits</th>
<th>Grade if completed</th>
<th>Term &amp; Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>CivilEn 2090</td>
<td>Professional Aspects of Civil and Environmental Engineering</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Student Signature: ____________________________________________________________ Date: ________________________

Advisor Name (printed): ____________________________________________
Major Program: CIVILEN

Advisor SIGNATURE: ____________________________________________ Date: ________________________

*To change a Minor program after of this form, the student must re-file a new Minor Program Form with all the appropriate signatures*