29-09

Engineering Faculty Document No. 29-09
December 1, 2008

To: **The Engineering Faculty**
From: **The School of Engineering Education and the First-Year Engineering Curriculum Committee**
Subject: **College of Engineering Admissions Requirements**

The Faculty of the School of Engineering Education and the First-Year Engineering Curriculum Committee have approved the following admission requirements for the College of Engineering. This action is now submitted to the Engineering Faculty with a recommendation for approval to take effect for beginning students entering the college with the admission class of 2010, 2012 and thereafter.

1) **Addition of a high school Social Studies Requirement.**

   From:

   The current high school requirements for admission into the College of Engineering do not include any Social Science (i.e., 0 credits (0 years) of Social Studies).

   To:

   Beginning with the entering class of 2010, the requirements for admission into the College of Engineering include 6 credits (3 years) of Social Studies. All other requirements remain in place.

2) **Change in the number of high school Mathematics credits.**

   From:

   The current high school Mathematics requirement for admission into the College of Engineering is 6 credits (i.e., 6 credits (3 years) of Mathematics) with a strong recommendation for 8 credits (4 years) (see EFD 38-96).

   To:

   Beginning with the entering class of 2012, the requirement for admission into the College of Engineering is 8 credits (4 years) of Mathematics. All other requirements remain in place.

3) **Beginning with the entering class of 2012, the Core 40 with Academic Honors standard is "expected" for admission into the College of Engineering though not required.**

Rational:

Addition of a high school Social Studies Requirement:

The Indiana Commission on Higher Education (ICHE) recently published a report "Reaching Higher" located at http://www.che.state.in.us.Reaching%20Higher.shtml. This report recommends that institutions of higher education within the state raise their admission requirements to meet the state standards called the Core 40 by the time of the admission of the class of 2011. The College of Engineering is currently very close to compliance with this request. By adding the requirement of the 6 credits (3 years) of Social Studies, we will meet this requirement. The goal is to meet the requirement for the entering class of 2010, one year prior to the state's requested deadline.

Change in the number of high school Social Mathematics credits:

The ICHE has recommended that the institutions of higher education within the state continue to raise their admission requirements to meet the state standards called the Core 40 with Academic Honors. Though full compliance with this recommendation is not proposed at this time, the raising of the minimum mathematics requirement to 8 credits (4 years) is. This is due to the work of the U.S. Department of Education (Adelman, 2006) which has indicated that academic success is closest related to mathematics momentum (http://www.ed.gov/rschstat/research/pubs/toolboxrevisit/toolbox.pdf). In order to achieve this goal, the college would add 2 credits (1 year) of Mathematics to the current admission requirements.

Expectation of the Core 40 with Academic Honors Standard for admission into the College of Engineering:

The Core 40 with Academic Honors would be "expected" though not required for the university and the college. The recommendation is that this level of admission requirements be enacted by the entering class of 2012, thus giving current high school students time to complete this additional mathematics requirement. All policies would be applied consistently to out-of-state students as well as in-state students.

	Core 40	Core 40 with Academic Honors	Engineering Current	Engineering Proposed for Class of 2012
English	8	8	8	8
Mathematics	6	8	6	8
Science	6	6	6	6
Social Studies	6	6	0	6
World Language	4	6-8	4	4

Finally, the current admissions interpretation of the science requirement is 2 credits (1 year) of Biology, 2 credits (1 year) of Chemistry or Physics, and 2 credits (1 year) of other science.

Adelman, C. *The Toolbox Revisited: Paths to Degree Completion From High School Through College.* Washington, D.C.: U.S. Department of Education, 2006.

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APPROVED FOR THE FACULTY
OF THE SCHOOLS OF ENGINEERING
BY THE ENGINEERING
CURRICULUM COMMITTEE
ECC Minutes #1
Date May 15, 2009
Chairman ECC Ray Cipra