College of Engineering
State of the College
Fall 2015
Overview

- People Update
- College Trends
- Biomedical Dept. Update
- Space Plan Update
- Campaign Update
- Q & A
“The more we strive to secure a common good corresponding to the real needs of our neighbors, the more we effectively love them. Every Christian is called to practice this in charity, in a manner corresponding to his vocation and according to the degree of influence he wields in society.” - Pope Benedict XVI
Mission Statement:
At Notre Dame, out of love for our neighbors, we are engineering a peaceful, healthy, and sustainable world.
Hiring New Faculty: 2015-2016

Na Wei, CEEES

Walter Scheirer, CSE

The College of Engineering
at the University of Notre Dame
Hiring New Faculty: 2015-2016

Ronald Metoyer, CSE

Jennifer Schaefer, CBE

The College of Engineering
at the University of Notre Dame
Our New Assistant Dean for Academic Affairs, Mike Ryan
Our New Assistant Dean for Diversity and Special Initiatives, Ron Metoyer
Our New Assistant Dean for Faculty Development, Ken Christensen
Suman Datta

• The inaugural Chang Family Professor for Engineering Innovation
  - EE Prof
  - IEEE Fellow
  - Formerly at Penn State and Intel
  - 145 patents!
Alan Seabaugh

• The Frank M. Freimann Professor of Electrical Engineering
  - EE Prof
  - IEEE Fellow
  - Director of LEAST
David Go

- The Rooney Family Associate Professor of Engineering
  - AME and CBE Prof
  - Toyota ECS Young Investigator Fellow
  - 2013 NSF Career Award
  - AFOSR Young Investigator Award
Ashley Thrall

- The Myron and Rosemary Noble Assistant Professor of Structural Engineering
  - CEEES Prof
  - Kinetic Structures Lab
  - 2014 NSF Career Award
Recent Career Award Winners

Anthony Hoffman
Collin McMillan
Tijana Milenkovic
Recent National Award Winners
Reuters Most Influential Minds

Nick Laneman  Prashant Kamat  Bert Hochwald
First-Year Engineering Course

Victoria Goodrich
Leo McWilliams
Yih-Fang Huang

New EG 10111 Course Structure introduced in Fall 2014
FY-EG Enrollment Trends

EG 10111 is 40% larger than 10 years ago

FY EG 10111 Enrollment

<table>
<thead>
<tr>
<th>Year</th>
<th>All</th>
<th>Men</th>
<th>Women</th>
<th>URM</th>
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<td>2020</td>
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Structure
12 Sections
~47 students/section

Staff
5 SPF faculty
2 graduate students
18 undergraduate student assistants

The College of Engineering at the University of Notre Dame
Retention Statistics

Retention %: EG 10111 to Sophomore Year

The College of Engineering at the University of Notre Dame
### Increased Student Satisfaction

CIF scores increased with new course format

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Rated</th>
<th>Composite Score of 10 CIF Items*</th>
<th>Overall Effectiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>Old Class – Lecture</td>
<td>3.2 ±0</td>
<td>2.98 ±0.03</td>
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<tr>
<td>EG 10111</td>
<td>Old Class – Learning Center</td>
<td>3.77 ±0.41</td>
<td>3.78 ±0.13</td>
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<td><strong>New Class</strong></td>
<td>4.13 ±0.34</td>
<td>4.16 ±0.41</td>
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<tr>
<td>Spring</td>
<td>Old Class – Lecture</td>
<td>3.61 ±0.04</td>
<td>3.53 ±0.10</td>
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<tr>
<td>EG 10112</td>
<td>Old Class – Learning Center</td>
<td>3.66 ±0.30</td>
<td>3.6 ±0.42</td>
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<tr>
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<td><strong>New Class</strong></td>
<td>4.21 ±0.45</td>
<td>4.20 ±0.56</td>
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</tbody>
</table>

These are average scores of all instructors for three years (AY2011-13) for old class, and AY2014 for new class.

* Composite Score indicates satisfaction with all aspects of the course.
Research Expenditures

YEAR

RESEARCH EXPENDITURES ($M)

$45
$40
$35
$30
$25
$20
$15
$10
$5
$-

03 04 05 06 07 08 09 10 11 12 13 14 15
Summer Study Abroad Update

- Financial Aid
  - 36% Received FA in 2013
  - 48% Received FA in 2014
  - 46% Received FA in 2015
- URM Participation
  - 21% in 2014
  - 23% in 2015

New SP Semester Opp in Rome
Combined International Study

Total


The College of Engineering at the University of Notre Dame
Biomedical Engineering Update

① Enthusiasm from all stakeholders; large student demand

② Focal areas: (1) tissue and cellular engineering, (2) disease diagnosis and therapies, (3) tissue and organ on a chip, (4) precision medicine, (5) global health, and (6) computational medicine and data mining

③ BME will have major impact on undergrad students, women in engineering, research

④ Timeline: Launch Program and Dept in 2016
Space Update – New “Homes”

McCourtney Hall – August 2016

- 10+ CBE Faculty
- 5+ AOV Hires
Nieuwland/Stepan or ECRC 2
- Rest of CBE
Space Update – New “Homes”

Haggar Hall (proposal to provost)
  -CSE Department
Fitzpatrick Hall
  -Design Deck
Research Building #2
  -Biomedical Engineering Department
  -Biophysics, Applied Biosciences
Space Update - Backfill

Fitzpatrick Backfill
- CEEES
- Computational and Data Sciences and Engineering
- AME
- Undergraduate Learning Lab

Stinson-Remick Backfill
- EE Circuits + Nano
Campaign Update

- Approx. $90M Raised to Date (total for previous campaign was ~$90M)
- 12 Endowed Professorships
- $11M Graduate Fellowship Endowment
- 1 of 2 Buildings Funded

27 months into 7 Year Campaign ~ 32% Complete