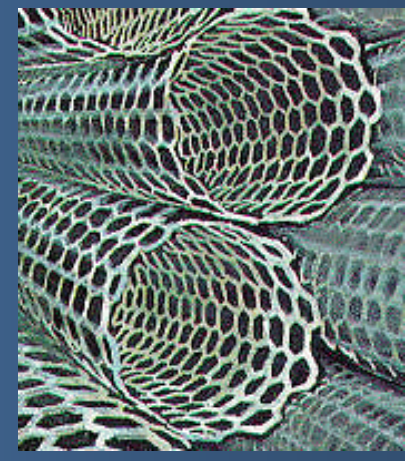




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DOE's Industrial Assessment Centers (IAC) Program: Results and Benefits



Sandy Glatt
Department of Energy (DOE),
Golden Field Office

Introduction to the Industrial Assessment Centers (IAC) Program

- Cross-cutting industrial assessments
- Performed by local teams of engineering faculty and students from 26 participating universities throughout the USA
- Normally consists of a one day site visit at an industrial plant



Eligible Plants

- Annual Energy Costs < \$ 2.5 Million
- Gross Sales < \$100 Million
- No. Employees < 500
- No In-house Energy Staff
- Be Within 150 Miles



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Critical Workforce Needs in Energy

- The energy industry could face a perfect storm
- The average energy worker will soon be almost 10 years older than the average U. S. worker – LAMPAC[†]
- NEEC* Survey results:
 - 82% of survey respondents - candidates lacks sufficient energy efficiency experience.
 - ~ 50% of survey respondents - candidates lack “hand-on” experience and/or specific technical training



More than 500,000 workers in the energy industry will retire within 5 to 10 years: U.S Department of Labor (November 2007)



1. Energy Analysts, 2. Energy Consultants, 3. Utility Supervisors, 5. Energy Engineers, 6. Energy Professors, 7. Energy Field Technician, 8. Environmental Engineers, 9. Oil and Gas Industry Analyst, 10. Mechanical Engineer, 11. Power Plant Engineer, 12. Petroleum Engineer.



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Source: InDemand Magazine, Issue 2, US Department of Labor

ETA – Employment & Training Administration

IAC Program and Workforce Development Professional Trainings for Students

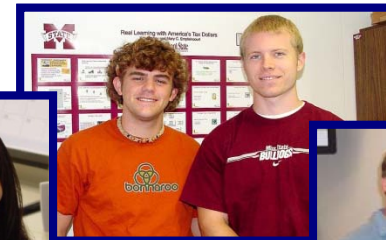
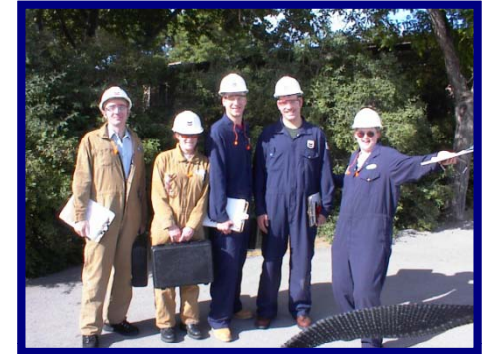
Year	Participating Students	Departing Students*	DOE-IAC Certificates Issued
FY 2005	403	168	60
FY 2006	339	162	75
FY 2007	298	120	61
FY 2008	262	100	68
FY2009 (to date)*	224	124	59

* Due to program hiring schedules and budget constraints the number of program participant departures is not expected to increase through the duration of FY09.



Creating The Next Generation of Energy-Focused Engineers

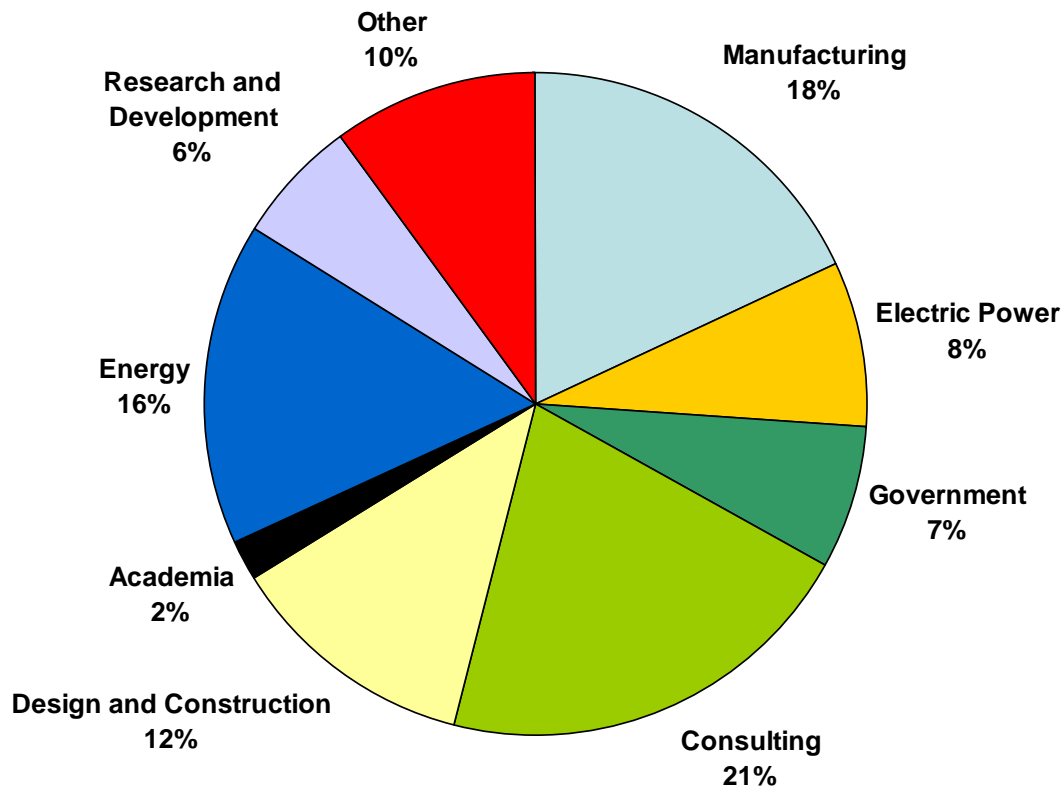
- 2,855 students trained since 1982
- 716 currently active alumni
- 120 – 180 students departing each year
- Engineering fields: Mechanical, Industrial, Electrical
- Student status: Undergraduates – 67%, Graduates – 33%
- Average time spent in IAC: 18 months



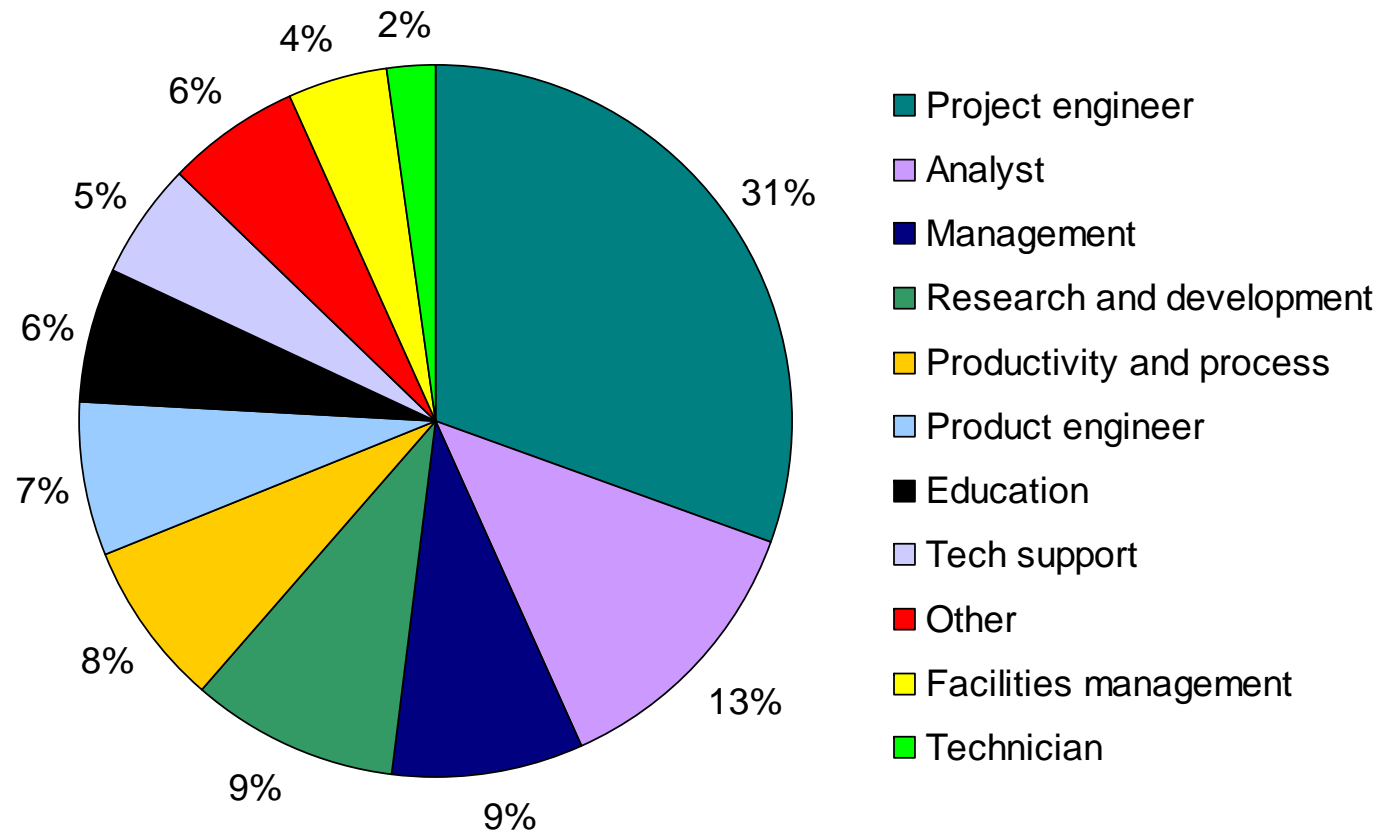
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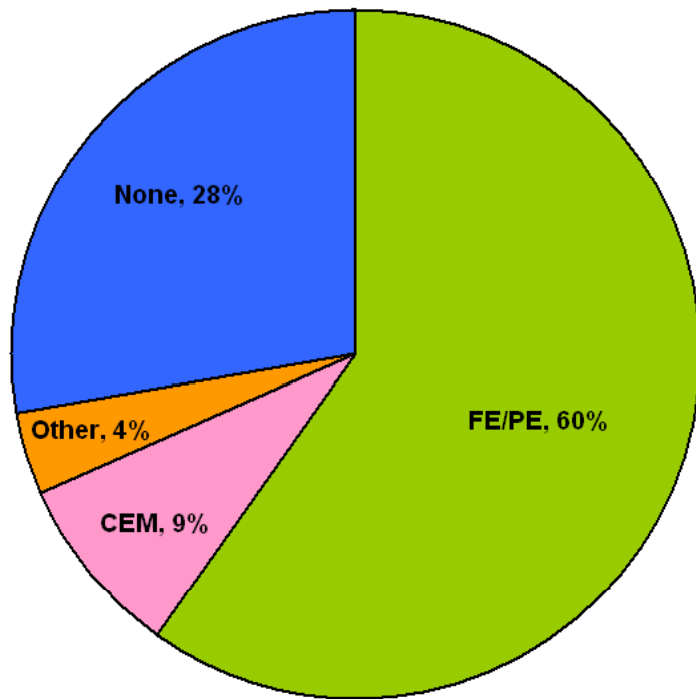
IAC Exit Interviews: Employment Type Upon Departure*



IAC Exit Interviews: Employment Roles Upon Departure*



Professional Certifications Held or Being Pursued by Students During IAC Employment*



- IAC Experience can be recognized as qualifying experience towards licensure
- IAC Engineers may be able to get PE 1 years earlier
- IAC experience is recognized by AEE for the CEM and some IAC students graduate with a CEM



Case Studies*



Nasr Alkadi (PhD, CEM) IAC West

- General Motors Energy Conservation Team, Wentzville Plant
- Recruited two IAC colleagues into the GM/Detroit Edison program
- Currently working at ORNL and actively recruiting IAC alumni



Ben Erpelding (M.S., P.E., C.E.M) IAC San Diego

- Director, Optimum Energy LLC.
- Over 11 years of experience in energy efficiency
- Performed over 500 detailed HVAC energy assessments
- Erpelding's efforts over the last 6 years resulted in a 16% decrease in San Diego County's energy consumption



Bill Eger (M.S.) IAC Dayton

- Energy Manager, Organizing Energy Office for the City of Cleveland, Ohio
- Eger's focus is on energy use & carbon reductions for the city's operations & the surrounding region.
- *"Without the IAC experience, training, & advising from IAC director Kelly Kissock & IAC alumna Michaela Martin, I wouldn't have been involved in such opportunities."*

