MEG Advisory Board Executive Committee Meeting

March 11, 2005
Agenda

- Welcome (C. McCarrell)
- Introducing new members
- Ray Kozak
- Department / College update
- Accreditation update.
- Recruitment of new board members
- Update on Alumni Survey
- Review of Industry Survey (Please see attached last year version) (C. McCarrell)
- Judges for Senior Design Contest (Dec/May)
Introducing New Members

- Michael Blois, BECHTEL SAIC
- John Hill, Southwest Gas Corp.
- Lance Robinson, Trane
Ray Kozak

- Possibilities of scholarship in his name.
Undergraduate program continues to grow at 15% rate for the second year.
Department Update, Enrollment
Department Update, Biomedical Position

- We started recruitment for a position in Biomedical Engineering. Fifty persons applied. The search is narrowed to 4.
- Interviews will start soon.
Department Update, Research

- Research activities continue expanding.
- Research expenditures were 4.5 million dollars for 2004 ($700,000 in 1998).
College Update

- Construction of a new Science and Engineering Building will start this summer.
- The College will host FIRST Robotic Competition in Thomas and Mack Center, March 31 - April 2.
- 2000 students are expected to attend.
- Dr. O’Toole is supervising a course where our students help several high school students with their projects.
College Update

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Accreditation Update

- We just received the official report.

- We are on our way to resolve the issues raised by the evaluators. The report raised two issues:
  - Machinist position. We received permission to start recruiting for the position.
  - We are looking for a bigger space for MEG 100L lab.
Recruitment of New Board Members

- Please suggest additional names
- We are lacking representative from county, cities, and small industry.
Update on Alumni Survey

- We have 330 alumni.
- 30 surveys were returned because of incorrect address.
- We got back 46 surveys as of this week.
- Preliminary results are listed here.
What type of position do you currently hold?

- Technical
- Technical / Project Management
- Management
- Student (Full-Time)
- Other
Update on Alumni Survey

Are you registered a P.E? What year?

Yes  No

3) What kind of engineering work does the company do?

Municipal  Federal  State  Large Industry  Small Industry  Other (please specify)
Update on Alumni Survey

Can you tell us something about your activities?

- HVAC
- Power Generation
- R&D
- Equipment
- Plumbing
- Other (please specify)
## Update on Alumni Survey

**Your studies in UNLV helped you develop the following capabilities:**

<table>
<thead>
<tr>
<th>Capability</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Not Applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>A fundamental knowledge of state-of-the-art and evolving areas associated with the mechanical engineering field</td>
<td>6</td>
<td>29</td>
<td>8</td>
<td>2</td>
<td></td>
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<tr>
<td>The ability to design and conduct experiments, analyze data, and utilize statistical methods</td>
<td>11</td>
<td>26</td>
<td>6</td>
<td>2</td>
<td></td>
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<tr>
<td>The ability to solve open-ended design problems</td>
<td>8</td>
<td>33</td>
<td>3</td>
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<td></td>
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<tr>
<td>The ability to use computers in solving engineering problems</td>
<td>12</td>
<td>27</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The ability to mathematically model and analyze engineering systems</td>
<td>14</td>
<td>20</td>
<td>10</td>
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<td></td>
</tr>
<tr>
<td>Oral and written presentation of technical information</td>
<td>10</td>
<td>23</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Introductory knowledge of economics</td>
<td>7</td>
<td>20</td>
<td>13</td>
<td>3</td>
<td>2</td>
<td></td>
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<tr>
<td>Working on multi-disciplinary team with peers</td>
<td>10</td>
<td>24</td>
<td>6</td>
<td>4</td>
<td>1</td>
<td></td>
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<tr>
<td>Motivation to pursue life-long learning</td>
<td>12</td>
<td>18</td>
<td>14</td>
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<td></td>
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<tr>
<td>A commitment to professional and ethical behavior in the work place</td>
<td>12</td>
<td>23</td>
<td>8</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>An awareness of world affairs and cultures</td>
<td>5</td>
<td>12</td>
<td>17</td>
<td>6</td>
<td>3</td>
<td>2</td>
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<tr>
<td>Recognition of the impact of engineering on local and global societies</td>
<td>7</td>
<td>15</td>
<td>16</td>
<td>5</td>
<td>2</td>
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<tr>
<td>Seeking professional licensure</td>
<td>8</td>
<td>19</td>
<td>10</td>
<td>2</td>
<td>1</td>
<td>4</td>
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</table>
## Update on Alumni Survey

**Your studies in UNLV helped you gain proficiency in the following areas:**

<table>
<thead>
<tr>
<th></th>
<th>strongly agree</th>
<th>agree</th>
<th>neutral</th>
<th>disagree</th>
<th>strongly disagree</th>
<th>not applicable</th>
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</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>17</td>
<td>23</td>
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<td>Thermal Sciences</td>
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<td>Fluid Mechanics</td>
<td>14</td>
<td>19</td>
<td>6</td>
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<td>4</td>
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<tr>
<td>Materials / Mechanical Design</td>
<td>9</td>
<td>28</td>
<td>6</td>
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<td></td>
<td>2</td>
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<tr>
<td>Dynamics / Automatic Control</td>
<td>6</td>
<td>23</td>
<td>8</td>
<td>5</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Computer Skills</td>
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<td>20</td>
<td>9</td>
<td></td>
<td></td>
<td>3</td>
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<tr>
<td>3-D Design / Engineering Drawings</td>
<td>5</td>
<td>13</td>
<td>13</td>
<td>7</td>
<td>4</td>
<td>3</td>
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<tr>
<td>Evaluation of Engineering Systems</td>
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<td>20</td>
<td>13</td>
<td>5</td>
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<td>1</td>
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<tr>
<td>Propose Innovative Solution to Engineering Problems</td>
<td>3</td>
<td>26</td>
<td>13</td>
<td>2</td>
<td>1</td>
<td></td>
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<tr>
<td>Communication Skills</td>
<td>5</td>
<td>23</td>
<td>12</td>
<td>5</td>
<td></td>
<td></td>
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<tr>
<td>Willingness to Work through Challenging Problems</td>
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<td>28</td>
<td>5</td>
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<tr>
<td>Effectiveness in Teams</td>
<td>9</td>
<td>21</td>
<td>9</td>
<td>4</td>
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<tr>
<td>Ability to Handle Peer Criticism of Their Projects or Designs</td>
<td>8</td>
<td>20</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Leadership Skills</td>
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<td>17</td>
<td>16</td>
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<td>Involvement in Professional Organizations</td>
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<td>Others (Please specify)</td>
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</tbody>
</table>
Do you consider that studying at UNLV made you prepared to enter the workforce compared to graduates of other universities?

- Much more prepared
- More prepared
- Same level of preparedness
- Less prepared
- Much less prepared
- Not applicable
Do you feel that studying at UNLV made you motivated to gain professional registration?
Review of Industry Survey

- Please see attached last year version
Judges for Senior Design Contest

- We need volunteers (one person for each semester).
- One Day Commitment.
- Judges attend Senior Design Banquet free of charge.